



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II

SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET SW SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

August 11, 2000

Space Science Services, Inc  
ATTN: Donald Geiger  
Radiation Safety Officer  
140 Southgate Road  
Dothan, Alabama 36301

SUBJECT: NRC INSPECTION REPORT 150-00001/00-04

Dear Mr. Geiger:

As a result of the Nuclear Regulatory Commission (NRC) inspection conducted on August 2, 2000, an NRC Form 591, SAFETY INSPECTION, is issued for your NRC license. The enclosed form indicates that no items of non-compliance were found during the above described inspection of your licensed activities. Please retain the form in your files. No acknowledgment of this letter is required. However, should you have any questions, we shall be pleased to discuss them with you. In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Thank you for your cooperation.

Sincerely,

Thomas R. Decker, Chief  
Materials Licensing/Inspection Branch 1  
Division of Nuclear Materials Safety

License No. AL 217

Enclosure: NRC Form 591



APPENDIX A INDUSTRIAL RADIOGRAPHY INSPECTION RECORD (IP 87120)									
REGION II									
Insp. Record #	2000/04	License #	AL 217			Docket #	N/A		
Licensee Name	Space Science Center, Inc								
Street Address	140 Southgate Road								
City, State, Zip	Dothan, Alabama 36301								
Location (Authorized Site) Being Inspected	Temporary job site under reciprocity at Cape Canaveral Air Force Base								
Licensee Contact Name	Donald Geiger				Phone #	1-800-929-2506			
Priority	1	Program Code	3320		Description	Radiography			
Date of Last Inspection:		04-12-00			Date of This Inspection		08-02-00		
Type of Insp.	Announced		Routine	X	Initial				
	Unannounced	X	Special						
Next Insp. Date	N/A	Normal		Reduced		Extended			
Justification for change in normal inspection frequency:									
Summary of Findings and Actions									
No violations, Clear 591 or letter issued				X	Non-cited violations				
Violation(s), 591 issued		Violation(s), letter issued							
Follow up on previous violations:									
Inspector - Printed Name	Orysia Masnyk Bailey								
- Signature	<i>Orysia Masnyk Bailey</i>				Date	8-9-00			
Approved - Printed Name	Thomas R. Decker								
- Signature	<i>Thomas R. Decker</i>				Date	8/8/00			

<b>PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY</b>		
<b>1.</b>	<b>AMENDMENTS AND PROGRAM CHANGES</b>	
License amendments issued since last inspection, or program changes noted in the license.		
Amendment No.	Date	Subject
N/A		
<b>2.</b>	<b>INSPECTION AND ENFORCEMENT HISTORY</b>	
Unresolved issues; previous and repeat violations; Confirmatory Action Letters; and orders.		
N/A		
<b>3.</b>	<b>INCIDENT/EVENT HISTORY</b>	
List any incidents or events reported to NRC since the last inspection. Citing "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection.		
None		
<b>PART II - INSPECTION DOCUMENTATION</b>		
NOTE: References that correspond to each inspection documentation topic are in Inspection Procedure 87120, Appendix B, "Industrial Radiography Inspection References."		
<p>The inspection documentation part is to be used by the inspector to assist with the performance of the inspection. Note that not all areas indicated in this part are required to be addressed during <u>each</u> inspection. However, for those areas <u>not covered</u> during the inspection, a notation ("Not Reviewed" or "Not Applicable") should be made in each section, where applicable.</p> <p>All areas covered during the inspection should be documented in sufficient detail to describe what activities and procedures were observed and/or demonstrated. In addition, the types of records that were reviewed and the time periods covered by those records should be noted. If the licensee demonstrated any practices at your request, describe those demonstrations. The observations and demonstrations you describe in this report, along with measurements and some records review, should substantiate your inspection findings. Attach copies of all licensee documents and records needed to support violations.</p>		
<b>1.</b>	<b>ORGANIZATION AND SCOPE OF PROGRAM</b>	

Management organization; authorities and responsibilities; authorized locations of use; type, quantity, and frequency of byproduct material use; staff size; delegation of Radiation Safety Officer (RSO) functions; reporting chain-of-command; multiple field offices and temporary job sites.

This was not addressed during the inspection. This was a field inspection of radiographers working under reciprocity.

**2. MANAGEMENT OVERSIGHT**

Management support to radiation safety; RSO; program audits or inspections; authorized individuals; as low as is reasonably achievable (ALARA) reviews.

Not reviewed during this inspection.

**3. FACILITIES**

Facilities as described; uses; control of access; engineering controls; separation of materials and explosives; containers labeled.

The inspector observed that the radiography device was properly labeled and under the control of the radiographers at all times. The source was locked in the camera between shots and the camera was locked in the truck when not in use.

**4. EQUIPMENT AND INSTRUMENTATION**

Radiography devices, source assemblies, source changers, special equipment meet performance requirements; appropriate survey instruments, dosimeters, alarming ratemeters.

The inspector observed that the radiographers were using an Industrial Nuclear Company IR 100 Camera SN# 4452 loaded with Source Model No. 32, SN # A991, (Iridium 192 46 Ci.) A collimator was used. The radiographers were equipped with Ludlum LUXEL dosimeters (exchanged monthly), Dosimeter Corporation Model No. 862 pocket dosimeters (calibrated 6/26/00 and 7/2/00) 3 SPEC 150 radiography devices, SN # 0226, 0320, and NDS Products alarming ratemeters (SN# 15289 and 4721 calibrated 2/17/00 and 7/11/00). The radiographers had and used two NDS ND-200 survey meters (SN# 685 and 4630, calibrated 6/14/00 and 6/20/00). The Air Force requires radiographers to have two pocket dosimeters and issues a film badge in addition to the NRC required dosimetry.

**5. MATERIAL USE, CONTROL, AND TRANSFER**

Materials and uses authorized; security and control of licenses materials; and procedures for receipt and transfer of licensed material; inventories; utilization logs.

The inspector determined that material use was as authorized on the license. Licensed material was secured and controlled in accordance with regulatory requirements. The radiographers were using a utilization log which was properly filled out. The log indicated that an equipment check had been performed prior to beginning, this was described by the radiographers and appeared to be adequate and appropriate.

6.	<b>INSPECTION AND MAINTENANCE</b>
Maintenance program; daily and quarterly inspections; records of defects; source modifications; Type B packages; 10 CFR Part 21 reports.	
The radiography device had been modified so that the screws on the safety latch plate were covered.	
7.	<b>FIELD STATIONS AND TEMPORARY JOB SITES</b>
Documents and records at field stations and temporary job sites; operating and emergency procedures; Agreement State licenses.	
The radiographers had available their NRC license, all required regulatory documents, and standard and emergency operating procedures.	
8.	<b>AREA RADIATION SURVEYS AND CONTAMINATION CONTROL</b>
Radiological surveys (instruments, perimeter, storage devices, post-exposure, post-source exchange, storage area); leak tests (frequency, sealed sources, depleted uranium devices); handling of radioactive materials; records; and public doses.	
The inspector observed that the radiographers performed surveys, with appropriate calibrated instruments, of the perimeter during radiography work, and of the cameras after each exposure. The radiographers demonstrated adequate knowledge of safe material handling practices. The radiographers conservatively set up a perimeter boundary at 0 mrem per hour.	
9.	<b>TRAINING AND INSTRUCTIONS TO WORKERS</b>
Interviews and observations of routine work; staff knowledge of all routine activities; Parts 19, 20, and 34 requirements; training programs, including written tests; supervisor, assistant training.	
The inspector observed the radiographers obtain several "shots" and noted that they worked with ALARA principles. The inspector determined that the radiographers were certified by the State of Georgia as the independent certification authority.	
10.	<b>RADIATION PROTECTION</b>
Radiation protection program with ALARA provisions; external dosimetry (dosimeters, direct reading dosimeters, alarming ratemeters); exposure evaluations; planned special exposures; dose and survey records and reports; annual notifications to workers; bulletins and other generic communications.	
The licensee has implemented a radiation protection program with ALARA provisions. The licensee utilizes LUXEL badges which are exchanged monthly, alarming rate meters and self reading dosimeters.	
11.	<b>RADIOACTIVE WASTE MANAGEMENT</b>

Storage areas; transfer; packaging; control, and tracking procedures; records.	
The device is attended or locked in the truck when not in use.	
<b>12.</b>	<b>DECOMMISSIONING</b>
Records relevant to decommissioning; decommissioning plan/schedule; notification requirements; cost estimates; funding methods; financial assurance; and Timeliness Rule requirements; changes in radiological conditions since decommissioning plan was submitted.	
Not reviewed.	
<b>13.</b>	<b>TRANSPORTATION</b>
Quantities and types of licensed material shipped; packaging design requirements; shipping papers; hazardous materials (HAZMAT) communication procedures; return of sources; procedures for monitoring radiation and contamination levels of packages; HAZMAT training; and records and reports.	
The licensee transports its radiography devices in accordance with regulatory requirements. The device is properly labeled with appropriate information affixed. Shipping papers were correctly filled out and available in the event of an emergency.	
<b>14.</b>	<b>NOTIFICATIONS AND REPORTS</b>
Reporting and followup of theft; loss; incidents; overexposures; radiation exposure reports to individuals; reporting Part 21 defects and certain equipment failures.	
There have been no events, exposure reports are available to employees.	
<b>15.</b>	<b>POSTING AND LABELING</b>
Notices; license documents; regulations; bulletins and generic information; area postings; and labeling of containers of licensed material; markings.	
All posting and labeling is in place and in accordance with regulatory requirements. The license and regulations are provided to radiographers. Containers are correctly marked.	
<b>16.</b>	<b>INDEPENDENT AND CONFIRMATORY MEASUREMENTS</b>
Areas surveyed and measurements made; comparison of data with licensee's results and regulations; and instrument type and calibration date.	
The inspector surveyed the licensee's perimeter boundary, while the source was exposed, with a XETEX 335B, SN 0734746800, calibrated on 12/8/99. Readings and outside of the were 0 mr per hour.	
<b>17.</b>	<b>VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES</b>

State requirement and how and when licensee violated the requirement. For NCVs, indicate why the violation was not cited. Attach copies of all licensee documents needed to support violations.

**18. PERSONNEL CONTACTED**

Identify licensee personnel contacted during the inspection (including those individuals contacted by telephone).  
 Use # to indicate individual present at entrance meeting.  
 Use \* to indicate individual present at exit meeting.

Name	Title	Phone No.	In Person or By phone
Ranier E. Valentine	Radiographer		In person
Jeffrey Jones	Radiographer's Assistant		In person
Donald Geiger	Radiation Safety Officer		By phone

**19. PERFORMANCE EVALUATION FACTORS**

A.	Lack of senior management involvement with the radiation safety program and/or RSO oversight.			Y		N	
B.	RSO too busy with other assignments.			Y		N	
C.	Insufficient staffing.			Y		N	
D.	RSC fails to meet or functions inadequately.	N/A	X	Y		N	
E.	Inadequate consulting services or inadequate audits conducted.	N/A		Y		N	

**REMARKS** : (Consider the above assessment and/or other pertinent Performance Evaluation Factors (PEFs) with regard to the licensee's oversight of the radiation safety program)

This was not assessed

**20. SPECIAL CONDITIONS OR ISSUES**

NONE	X	Special license conditions; year-2000 effects of computer software and embedded systems.
------	---	--

**PART III - POST- INSPECTION ACTIVITIES**

**1. REGIONAL FOLLOWUP ON PEFs**

**2. DEBRIEF WITH REGIONAL STAFF**

Post-inspection communication with supervisor, regional licensing staff, Agreement State Officer; and/or State Liaison Officer.	
Briefed Branch Chief by telephone 8/2/00.	
<b>3.</b>	<b>YEAR-2000 ISSUES</b>
Convey, to the NMSS Year-2000 Coordinator, all year-2000 licensee-identified problems and corrective actions taken.	
N/A	

TO ADVANCE TO NEXT SECTION OF FORM - PUSH PAGE DOWN KEY