

FROM: TO:916305151078 07/16/2014 09:21:09 #8219 P.002



ATK Defense Group  
Small Caliber Systems  
P.O. Box 1000  
Independence, MO 64051-1000

Proud Operator of the  
Luko City Army Ammunition Plant

[www.atk.com](http://www.atk.com)

July 15, 2014

Materials Licensing Branch  
U. S. Nuclear Regulatory Commission, Region III  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

Subject: Expedited Review Requested – RSO Change License Amendment Request for License Number 24-24576-01 (Docket No. 030-28929)

Dear Sir or Madam:

We are requesting an expedited review for license number 24-24576-01. The expedited review is being requested because the current RSO, Eric Patton, is leaving the company. Please review the following requested changes below along with the supporting documents.

1. Remove the existing Radiation Safety Officer (Eric Patton) (Section 12)
2. Add Rick Thompson as the Radiation Safety Officer (Section 12). Rick Thompson will not be performing non-routine maintenance of the ATK, Inc. Model 2010 gauge.
3. Add Rick Thompson as an Authorized User (Section 11)
4. Remove Michael Case as an Authorized User (Section 11)

Mr. Rick Thompson completed his Radiation Safety Officer Training from Nevada Technical Associates in February 2014. Enclosed are is the course outline and training documents for the proposed RSO, Rick Thompson.

Rick Thompson will be the primary contact for questions regarding this amendment application. He can be contacted at (816) 796-7101 x7519 or [Ricky.Thompson@atk.com](mailto:Ricky.Thompson@atk.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Dudgeon", is written over a horizontal line.

Brian Dudgeon  
Safety & Security Manager  
[Brian.Dudgeon@ATK.com](mailto:Brian.Dudgeon@ATK.com)  
Work (816) 796-4794  
Fax (816) 796-5043

Encl:

1. NRC Form 313
2. Applicant Background
3. Supporting Training Documents

FROM: TO:916305151078 07/16/2014 09:22:00 #8219 P.003

<b>NRC FORM 313</b> (03-2014) 10 CFR 30, 32, 33, 34 35, 36, 37, 39, and 40	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>   <b>APPLICATION FOR MATERIALS LICENSE</b>	<b>APPROVED BY OMB: NO. 3160-0120</b> EXPIRES: 06/31/2016 Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to <a href="mailto:Infocollections.Resource@nrc.gov">Infocollections.Resource@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. It means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.								
<b>INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.</b>										
<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001  <b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b> <b>IF YOU ARE LOCATED IN:</b>  ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,  <b>SEND APPLICATIONS TO:</b>  LICENSING ASSISTANCE TEAM DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19406-2713		<b>IF YOU ARE LOCATED IN:</b>  ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, <b>SEND APPLICATIONS TO:</b>  MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 Lisle, IL 60532-4352  ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING,  <b>SEND APPLICATIONS TO:</b>  NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 1800 E. LAMAR BOULEVARD ARLINGTON, TX 76011-4511								
<b>PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.</b>										
1. THIS IS AN APPLICATION FOR (Check appropriate item)  <input type="checkbox"/> A. NEW LICENSE <input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>24-24576-01</u> <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____		2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)  Mr. Rick Thompson, Alliant Techsystems (ATK) Operations, LLC. Lake City Army Ammunition Plant (Safety Dept.) 25201 East 78 Hwy. or P.O. Box 1000 Independence, MO 64051-1000								
3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED  Alliant Techsystems (ATK) Operations, LLC Lake City Army Ammunition Plant 25201 East 78 Hwy. Independence, MO 64056		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Rick Thompson BUSINESS TELEPHONE NUMBER <u>816-796-7101</u> BUSINESS CELLULAR TELEPHONE NUMBER <u>816-504-7535</u> BUSINESS EMAIL ADDRESS <u>Rick.Thompson@ATK.com</u>								
SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.										
5. RADIOACTIVE MATERIAL a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time		6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.								
8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS		7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE								
10. RADIATION SAFETY PROGRAM.		9. FACILITIES AND EQUIPMENT								
12. LICENSE FEES (Fees required only for new applications, with few exceptions*) (See 10 CFR 170 and Section 170.31)		11. WASTE MANAGEMENT								
13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.  THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 82 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.										
CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE  Brian Dudgeon, Safety & Security Manager		SIGNATURE DATE <u>7/15/14</u>								
<b>FOR NRC USE ONLY</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>DATE RECEIVED</td> <td>DATE RECEIVED</td> <td>DATE RECEIVED</td> <td>DATE RECEIVED</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>			DATE RECEIVED	DATE RECEIVED	DATE RECEIVED	DATE RECEIVED				
DATE RECEIVED	DATE RECEIVED	DATE RECEIVED	DATE RECEIVED							

**Rick Thompson**

*Has successfully completed the 40 hour technical short course entitled*

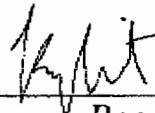
**Radiation Safety Officer**

*February 17, 2014 - February 21, 2014*

*This certificate presented in Arlington, TX, on February 21, 2014*

*By Nevada Technical Associates, Inc.*

Approval codes for CE units are: ASRT 30.5 units: NVZ0146001, AAHP 32 units: 2008-00-005, ABIH 4.5 units: 08-1362

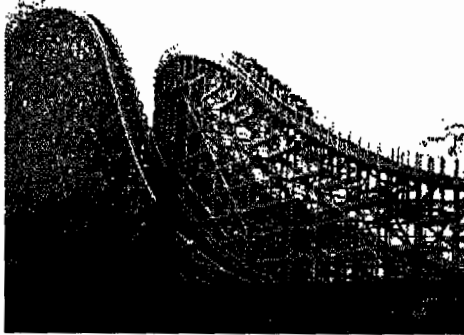


**Roger Sit**  
Instructor

Certificate Number: 1392620409

# Radiation Safety Officer Training Course in Texas

You are here: [Home](#) » [Radiation Safety Officer Training](#) » **Radiation Safety Officer Training Course in Texas**



Six Flags Theme Park in Arlington, TX

The fee for this course is \$1450.

## 2014 RSO Course Dates in Arlington, TX:

February 17 -21, 2014 [[register online](#)]

October 6 – 10, 2014 [[call to register](#)]

**Nevada Technical Associates is on the list of approved RSO course providers for the State of Texas.**

Additional training or experience may be required for some licensees, such as radiographers, well loggers, NORM decon service providers, and medical care providers.

The course is designed to provide the technical and practical information needed to prepare a person to be an effective radiation safety officer. It will also be useful as general introductory training for anyone who works with radioactive materials or who may be required to be an alternate radiation safety officer.

Topics to be covered include atomic structure, properties of ionizing radiation, shielding, radiation and biological effects of radiation exposure, radiation detection and measurement, state and federal regulations, dosimetry, emergency procedures, records/documentation and transportation regulations. The course outline is available below in PDF format.

Those who have no prior experience in radiation safety are encouraged to take our CD-ROM course before attending this course. The cost for the CD is \$99. For more information and to order, scroll to the bottom of [this link](#).

**Registration:** You can register online, via fax or by telephone. If you choose to register online, please see the link next to the dates you are interested in attending.

**Location:** The Holiday Inn Express Hotel and Suites, 1721 Pleasant Place, Arlington, Texas 76015. The reservations number at the hotel is 817-784-8750. The hotel is also known as the I-20 Parks Mall Holiday Inn Express. The hotel is convenient to many area attractions including Six Flags and downtown Dallas and Ft. Worth. More information can be found at this link: [Holiday Inn Express](#)

**Continuing Education Units:** The course is approved for Continuing Units by the American Academy of Health Physics, The American Society of Radiologic Technicians and the American Board of Industrial Hygiene. For the American Academy of Health Physics, the units granted are 32 C.E. Units, for the ASRT, it is 30.5 units and for the ABIH, it is 4.5 CM points. We will apply for Continuing Education Credits from other organizations if you will contact us at least 45 days prior to taking the course. Approval from other organizations is usually easy to get but some require that application be made prior to the course.

If you would like to receive a course outline by fax, please call us or see the [Outline in PDF format](#).

**Is this course what I need to become a Radiation Safety Officer?** We are often asked a question similar to the following. "Does your Radiation Safety Officer course fulfill the training requirements of my state for becoming an RSO?" In many cases it will, but for reasons that will be explained below, there is no simple answer to this question.

The responsibilities of a Radiation Safety Officer vary enormously from very slight as in the case of a business with one or two sealed sources, to a hospital that uses x-rays and nuclear medicine for treatment of patients. Obviously the training requirements of the latter will be far greater than for the former. The best source of information about training requirements for a particular case will be the regulatory agency that oversees your organization. In general, the regulatory agencies look at education and experience as well as considering short training courses such as ours. Also, the training requirements are not uniform in the various states.

It is also important to note that the federal government and most states do not review, approve or evaluate radiation safety courses. However, the state of New Mexico does have an approved list and our course has been approved by the State of New Mexico. Perhaps the best way to evaluate a Radiation Safety Officer course is to consider the qualifications of the instructors and also recommendations from those who have previously attended the course. Our instructors are well qualified and have either Certification as a Health Physicist or have an advanced degree in that or a closely related field. Nevada Technical Associates, Inc., has been offering this course for 12 years.

**Nevada Technical Associates, Inc.**  
**Radiation Safety Officer**  
**Course Outline**

Starting time: 8:30 each day.

The topics below will be more or less evenly distributed over the duration of the course.

1. Introduction
  - a. Course objectives and schedule
  - b. Origins of nuclear science
  - c. Atomic structure, isotopes, nuclear stability
  - d. Equations of radioactive decay
2. Radioactive Decay Processes
  - a. Alpha emission
  - b. Beta emission
  - c. Gamma emission
  - d. Other decay processes
  - e. Statistics of radioactive decay
3. Interaction of Radiation with Matter
  - a. Modes of interaction
  - b. Heavy charged particle interactions
  - c. Beta particle interaction
  - d. Gamma ray interaction
  - e. Neutron interaction
4. Radiation Detection and Measurement
  - a. Gas-filled chambers
  - b. Scintillation detectors
  - c. Semi-conductors
  - d. Photographic emulsions

## 5. Biological Effects of Radiation

- a. Radiation quantities and units
- b. Quality factors
- c. Biological effects
- d. Mechanisms of biological damage
- e. Acute, whole-body gamma radiation
- f. Risk of stochastic effects
- g. Fatality rates in various industries
- h. Radiation dose from natural and man-made sources

## 6. Shielding

- a. Charged particle shielding
- b. Photon shielding
- c. Neutron shielding
- d. Facility shielding

## 7. Personnel Radiation Dosimetry Devices and Methods

- a. External monitoring
- b. External dose evaluation
- c. Internal monitoring
- d. Internal dose assessment

## 8. Federal and State Regulations

- a. Chronology of standards
- b. Sources of standards, recommendations and requirements
- c. Basis of Standards
- d. Current regulations
- e. Licensing procedures

## 9. Radiological Safety Surveys, Records and Documentation

- a. Surveys and inspections
- b. Radiological Controls and ALARA
- c. Records and documents
- d. Operating and emergency procedures and document control

## 10. Radioactive Material Transportation and Disposal Regulations

- a. Applicable regulations
- b. Categories, packaging and limits
- c. Manifests, records, markings, and labels
- d. Radwaste disposal methods, sites, records and regulations

## 11. Radiological Emergencies

- a. Definitions, classifications and phases
- b. Notifications and assistance
- c. Response: isolation, radiation and medical evaluations
- d. Review of accident causes and recent accidents

## 12. Drafting a Radiological Safety Plan (student exercise)

- a. Attendees prepare program
- b. Exercise review



### Applicant Background

Rick Thompson, Safety Engineer

#### **Education:**

B.S. Industrial Safety, Central Missouri State University

M.S. Industrial Safety, Central Missouri State University

#### **Experience:**

- 1.5 years gauge usage at Independence Power and Light
- 10 hours contact time on the ATK Model 2010
- 8 years Industrial Hygiene monitoring at Impact Health Services

#### **Equipment Certification/Training**

- Olympus NDT XRF hand held X-ray
- ATK Model 2010 Authorized user/Gauge Repair from Alliant Techsystems

FROM: TO:916305151078 07/16/2014 09:20:58 #8219 P.001



ATK Lake City Ammunition  
P. O. Box 1000  
Independence, MO 64051-1000

## Fax Cover Sheet

Date <b>7/16/14</b>	Pages to Follow <b>9</b>
To <b>Jennifer Bishop</b>	Company <b>NRC, Region III</b>
Business Number <b>630-829-9607</b>	Fax Number <b>630-515-1078</b>
From <b>Rick Thompson</b>	Company <b>ATK Small Caliber Systems</b>
Business Number <b>816-796-7101 x7519</b>	Fax Number <b>(816) 796-5043</b>
Comments <b>License Amendment Request</b>	