

INNOVATION AT WORK

Connecting Visionaries in Radiation Safety, Science and Industry

Conrad Orlando Resort, FL – July 28th – August 1st



From Problems to Solutions Mirion Services is Here to Help Mirion Services » More than just Support

Nicole Guglietta & Kara Phillips

Mirion Services

Mirion Connect | Annual Users' Conference 2025 Orlando, Florida



From startup assistance to training, ongoing support to optimizing operations with tailored customizations, Mirion Services partners with you to provide confidence and expertise. We invite you to join us for an open forum to discuss how we can develop an offering that meets the needs of end users, IT teams, financial teams, and leadership.





Agenda

- Who We Are
- Services beyond Support
- Some Feedback from You
- Mirion CSA



Mirion Technical Services – Who we are

Technical Services Team



John Cox jcox@mirion.com



Mike Diaz mdiaz@mirion.com



Jess Griffin jegriffin@mirion.com



Celeste Olive colive@mirion.com



Terry Schwager tschwager@mirion.com



Cathey Sharp csharp@mirion.com



David Yostrum dyostrum@mirion.com



Jeff Wetzler jwetzler@mirion.com



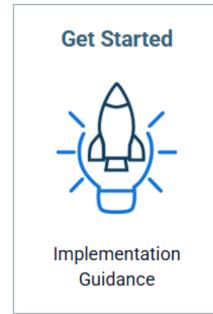


➤ More than 250 of Experience... Combined

Mirion Services – The Full Team



Mirion Services ⇒ More than just Support















Example with WebiSmarts

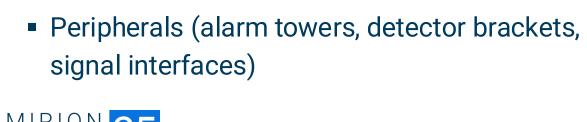
Now serviced and exclusively sold* by Mirion

A web-based software application designed for Cyclotron and PET facilities to perform radiological stack monitoring, area monitoring, and production monitoring.

*Exclusivity for North America Only

WebiSmarts Solution includes

- WebiSmarts Software
- Data Processing Units (DPUs)
- Calibration Probes (GM-41 and GM-42)
- Coincidence Stack Exhaust Monitoring (PM-11)





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WebiSmarts [new] Service Portfolio

Get Started

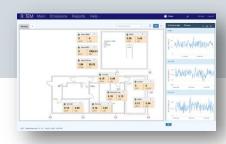
- Pre-Install Site Survey
 WBSM-Survey
 - Planning survey performed by qualified Mirion Support Engineer
 - Determines equipment volume, location, and infrastructure requirements
 - Required for WebiSmarts Installation Service
- 2) Primary Installation Service Install-WBSM-Base
 - Installation of Rotem products, up to 5 DPU/DRM Area Monitors and up to 2 BAK-0328 Stack Monitors
- 3) Additional Installations Install-WBSM-Add
 - Installation of Rotem products, for each additional 5 DPU/DRM Area Monitors beyond Primary Installation Service

Build Knowledge

- > ON-SITE WEBISMARTS OPERATOR & ADMINISTRATOR TRAINING SU-541-2
 - On-Site for up to 6 students
- > VIRTUAL WEBISMARTS
 OPERATOR & ADMINISTRATOR
 TRAINING

SU-541-V

• Virtual Training for to 6 students



Maximize Operations

- ➤ Calibration of GM-41 /CAL GM41
- ➤ Calibration of GM-42 /CAL GM42



➤ Trained Tech Support for techsupport@mirion.com



Get Started



Implementation Guidance





Training

Maximize Operations



Maintenance & Calibration





Consultation & Customization





You have a new system, but not enough time or knowledge to put it fully into operation?





Installation Services

Installation Services:

 Protect your investment with qualified Mirion professionals to get you system installed safely and accurately.



System Qualifications



 Need audit or IQ/OQ documentation? Our team will execute a comprehensive evaluation of system installation and operation to demonstrate performance to factory standards



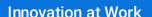
Application Setup Assistance:



 Bridge the gap from standard configuration to a system tailored for you. Mirion specialists work with you to refine nuclide libraries, QA configuration, counting procedures, and more.







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Introducing: Application Setup Assistance

"Our Mirion Services Expert is here to give you a helping hand to get started, to update your system, and to get the most out of your investment."

















> Application Setup Assistance is available for a wide range of systems:

For Apex-Gamma or Apex-Guard, Application Setup Assistance includes:

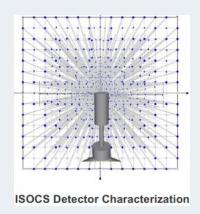
- Creating additional facilities, such as training or test environments
- Creating/Refining QA/QC setup for your specific application
- Curating nuclide libraries and optimizing analysis parameters, geometry calibrations, and counting/reporting procedures for 1 to 2 specific measurement applications

For Apex-Alpha/Beta, Application Setup Assistance includes:

- Device Setup and calibration for constant efficiency
- Creating and Refining QA/QC for your specific application
- Creating procedures for data review and unknown samples

➤ All Application Setup Assistance services are led by our team of Application-Expert Service Engineers





Interested in unlocking the advantages of ISOCS for your HPGe Fleet, but not sure how to get started?

- ➤ Mirion ISOCS/LabSOCS system allows for flexible efficiency geometries without a large source standard inventory.
- ➤ To use ISOCS, HPGe detectors require an in-depth efficiency characterization, typically completed at the Mirion Factory.
- Mirion's Detector Site Characterizations (Model STCAL) is another option:
- Detector Characterizations are performed on-site by Mirion Service:
 - For an existing fleet, reduced downtime
 - No detector warm-up required.
 - No need to ship detector or process an RMA
 - All hardware, electronics, and sources provided.
- Minimized Risk:
 - Eliminate shipping delays.
 - Reduced risk of damage during transport.
- Result: Your detector is fully calibrated, ready for ISOCS,
 and operational upon completion.







Implementation Guidance



Build Knowledge



Training

Maximize Operations



Maintenance & Calibration

Optimize Performance



Consultation & Customization





Mirion Training Courses

Mirion has more than 50 lecture, handson sessions, and interactive learning experiences.

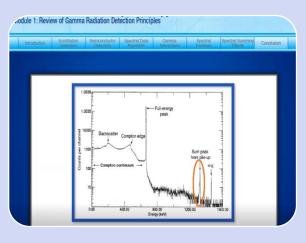
Training classes options





What's your Training Objective?







Develop Subject Matter Expertise

Our Focused and Progressive

Training Trax will guide you from
Fundamentals to Subject Matter
Expert, ensuring your Success.

Onboard Employees

Introductory and Self-Led
Training classes with
progress tests are great for
routine training programs.

Provide Rapid
Training for First
Responders

1- and 2-Day Trainings targeted for the needs of first responders

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- GP101 Principles of Radiation Detection
- GP101 Fundamentals of Gamma Spectroscopy
- GP101 Principles of Radiation Detection
- Fundamentals
 - SU-635 Apex-Gamma Operations
 - 🗻 Technician
 - SU-472 Genie 2000 Algorithms
 - Specialist
 - SU-601 Interpretation of Gamma Spectroscopy Results
 - SU-636 Apex-Gamma Advanced Topics
 - 📄 Subject Matter Expert





Progressive Training with Training Trax

- 7 Training Trax Topics to choose from:
 - Genie, Apex A/B, Apex Alpha, ISOCS, iCAM and now Radiopharma
- The Trax consist of 3-4 training levels
 - Fundamentals, Technician, Specialist and Subject Matter Expert
- Placement Exams Offered
- SME Certificate awarded after competition of Trax

Four new classes

On-Site & Virtual WebiSmarts Operator and Administrator Training SU-541-2 & SU-541-V

Two days for up to 6 students

SPIR-Ace/View Overview and Operations SU-551-1

- One-Day Class for up to 10 students
- Training Topics and Hands-on Exercises include Standard Operations, Reviewing Event History, Exporting Data, Calibration, and Maintenance

On-Site Radiation Tolerant Camera Training SU-920-3

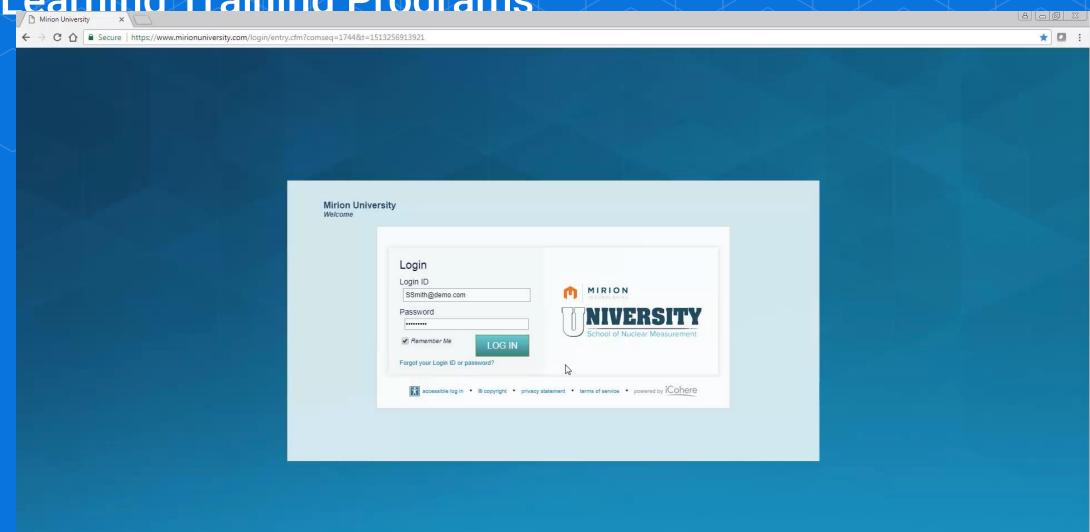
- Three Days on-site for up to 6 students
- Topics include theory, image sensor replacement & adjustments, hands-on troubleshooting, video signal with oscilloscope, maintenance, assembly and testing

On-Site DosiServ Operational Training SU-532-2

- Two Days on-site for up to 6 students
- Training topics include Hardware, DosiServ Operations, and Web Reports



E-Learning Training Programs





Rad Responder Classes

- 1-Day and 2-Day focused training sessions for up to 10 attendees
- Scheduled individually or several in one week



Trainings

<u>Protecting Yourself During Nuclear Radiological Incidents</u>

AccuRad Personal Radiation Detector First Response Training

Basic Radiation Fundamentals First Response Training

Advanced Radiation Fundamentals First Response Training

Special Nuclear Materials First Response Training

Nuclear Radiological Detection for Emergency Response







Implementation Guidance





Training

Maximize Operations



Maintenance & Calibration





Consultation & Customization



Introducing Mirion's

CAAS Service Center of Excellence

Located in Oak Ridge, TN



Mirion has established a **dedicated Service Center of Excellence** at our Oak Ridge, Tennessee facility to provide comprehensive, U.S.-Based support for critical nuclear instrumentation and systems, including CAAS gamma and neutron probes.

- ✓ Faster Response Times: Eliminates delays from international logistics.
- ✓ Cost Efficiency: Lower shipping, customs & tariffs, and travel costs.
- ✓ **Confidence**: Direct access to qualified field service technicians and qualified replacement parts.



Full-Service Solutions for Criticality Accident Alarm Systems

Mirion CAAS Services



- Local Support with specially trained & qualified Service Engineers to maximize uptime and facilitate repairs and maintenance.
- Includes 2 preventive maintenance visits and 1 emergency visit annually.
- **Training Programs**: On-site and virtual training for operators and maintenance teams.
- US-Based Mirion Service Center of Excellence
 - Faster, more reliable, and more efficient calibration and repair turnaround

WHY MIRION?



- **Proven Legacy**: Over 40 years of experience supporting the nuclear industry.
- **Product and Application Expertise:** Deep knowledge of system architecture, safety standards, and regulatory compliance.
- Global Reach, Local Presence: Combining international best practices with regional responsiveness.
- Commitment to Safety & Reliability: Mirion solutions minimize false positives, maximize uptime, and strive to ensure personnel protection.



Let's be smarter about repairs

- Extended Warranties
 - Budget ahead of time in case something goes wrong
 - No need to get emergency approvals
- Spare Parts Management
 - Proactively "stock" critical spare parts
 - Many storage solutions
 - Also useful for "consumables", such as ICAM filters



Customer Support Agreements (Repair & Spare Parts Focus)

	Extended Warranty CSA	Introductory CSA	Expanded On-Site CSA	Customized On-Site CSA
Priority Technical Support	✓	4	✓	✓
Return-to-Factory Repairs, including Parts Replacement(1)	✓	✓	✓	✓
Discounted Services ⁽²⁾ (10% off list price)	✓	✓	~	~
Rollover Services				~
Dedicated Spares Inventory				Optional
New Hardware Replacement Allowance				Optional
On-Site Preventative Maintenance Visits		1 per year	2 per year	Flexible
On-Site Emergency Visits		1 per year	2 per year	Flexible

⁽¹⁾ Voluntary HPGe detector reconfiguration not included



⁽²⁾ Customers with a Support Agreement are eligible for a 10% discount on additional services purchased during the support period for equipment covered by the CSA.

⁽³⁾ Multi-year discounts are based on the support agreement terms

More integrated support for our Radio-isotope Producer & Radiopharma Customers





- Nuclear Power
- Military & Defense
- Environmental Monitoring
- D&D
- Research & Education



Mirion Medical

- Hospitals
- Diagnostic Centers
- Nuclear Medicine
- Radio pharmacies

Radio-Isotope Producers

- Typical systems may include:
 - Stack Monitors
 - Air Monitors
 - HPGe Gamma Spec systems
 - Dose Calibrators



CRC-77tHR

Cyclotron/Production (High activity)

High(<u>est</u>) activity for production & pharmacies, up to 400 Ci Tc99m, 130 Ci F-18

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New! Dose Calibrator can be added to your CSA



WHAT'S INCLUDED

- Priority Technical Support
- Return to factory repair
- Loaner equipment during repair
- For customers with existing on-site CSAs, Performance verification checks during regular PV visits

WHAT YOU GET

- More comprehensive coverage for your systems
- Reduced administrative overhead
- Single Point-of-Contact



Voice of Customer Feedback: What if... else we could do

Calibration Services for Handheld HP Products:

- Did you know we can offer Calibration Contracts?
- Would you be interested in Extended Warranties with Annual Calibration Services?
- Would "Keep it Calibrated" reminders be useful?

What if we...

- Offered training classes for self calibrations and repairs?
- Could provide some HPGe maintenance/repair services closer to (or even at) your site?







Implementation Guidance





Training

Maximize Operations



Maintenance & Calibration

Optimize Performance



Consultation & Customization





Mirion Consulting Services Survey

CONTACT INFORMATION

 Name:

 Company:

E-mail: ______ Phone: _____

1. What's one challenge or inefficiency in your current systems or processes that you've been trying to solve internally—maybe even just living with?



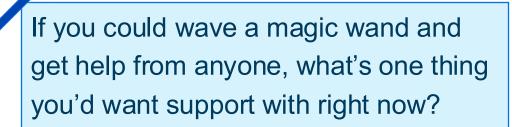


Mirion Consulting Survey - Challenges

Have you delayed or deprioritized any projects due to internal limitations?

Assuming yes, what's holding you back?

- □ Lack of time or staff
- □ Lack of in-house expertise
- □Competing priorities
- □Unclear where to start
- **□**Budget constraints
- ☐ We've adapted and just live with it
- **□**Other





Mirion Consulting Survey: What does Consulting mean to you?

When you think of consulting services from Mirion, what comes to mind? (Select all that apply)

- Troubleshooting or technical support
- Custom training or onboarding
- Workflow or process optimization
- Documentation or procedure writing
- Integration with other systems
- Project planning or coordination
- Not sure what's included
- Other (please specify):

Here is what we think of:

- Physics Expertise
- Library curation
- Optimized Analysis settings
- Workflow optimization review
- Report customization
- Customized User Interfaces
- Training program recommendations
- Data Review
- Audit Prep
- Procedure Writing
- Integration with other systems
- IT / Technology Consulting
- Data/system migration planning



Consulting Example: Contamination Monitors

Dual Purposes:

Can your contamination monitor double as a passive whole-body counter?

- Contamination monitors are for surface contamination.
- But... with proper studies a gammasensitive contamination monitor can be used for whole-body counting clearance measurements.
- "CM-Passive" Mirion Services brings calibration phantoms to measure CM whole-body sensitivity and provides report needed for updating procedures.

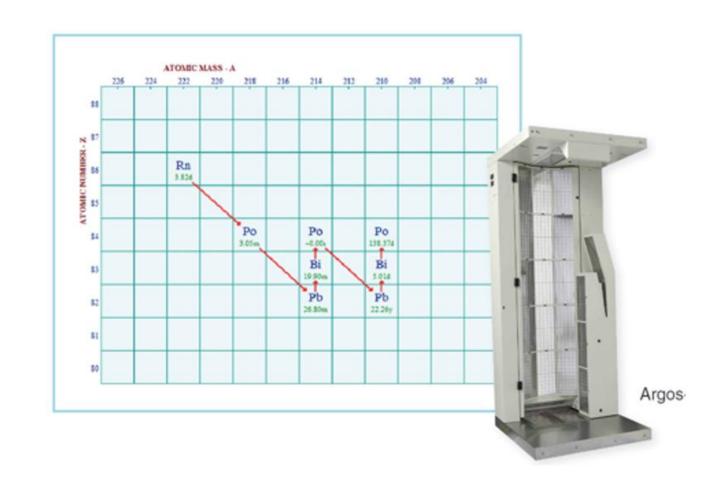




Consulting Example: Contamination Monitors

Delays at the RC exit: Can we reduce false positives?

- Radon Progeny in the environment can cause false positives, causing delays at the RC exits
- Radon Progeny Rejection Algorithms can help! But they need to be optimized...
- "CM-Radon" a remote service to review your CM data and provide recommended updates





CSAs for Expertise (More than just support)

	Extended Warranty CSA	Introductory CSA	Expanded On-Site CSA	Customized On-Site CSA
Priority Technical Support	✓	✓	✓	✓
On-Site Preventative Maintenance Visits		1 per year	2 per year	Flexible
On-Site Emergency Visits		1 per year	2 per year	Flexible
Discounts - Multi-Year(3)			✓	4
Mirion Professional Services				✓
Complimentary Mirion Connect Registration for 2 Attendees				✓
Rollover Services				4
E-learning Self-Led Training (1 free course)		✓		









Customer Support Agreement





	Extended Warranty CSA	Introductory CSA	Expanded On-Site CSA	Customized On-Site CSA
Priority Technical Support	4	~	✓	4
Return-to-Factory Repairs, including Parts Replacement ⁽¹⁾	✓	~	~	✓
Discounted Services ⁽²⁾ (10% off list price)	✓	~	~	4
Online Customer Portal Access	✓	✓	✓	✓
Firmware Updates		4	✓	4
On-Site Preventative Maintenance Visits		1 per year	2 per year	Flexible
On-Site Emergency Visits		1 per year	2 per year	Flexible
Discounts — Multi-Year ⁽³⁾			4	4
Mirion Professional Services				4
Complimentary Mirion Connect Registration for 2 Attendees				4
Rollover Services				4
Dedicated Spares Inventory				Optional
New Hardware Replacement Allowance				Optional
E-learning Self-Led Training (1 free course)		✓		



M