

TRTR 2022

Quarter
Two



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LETTER FROM THE CHAIR



Colleagues,

The TRTR annual meeting in State College is fast approaching. Registration, hotel reservations, and abstract submission are now all available via the new TRTR website, still at www.trtr.org. I encourage everyone to stay at the conference hotel as long as rooms are still available. On the nights with no conference events, shuttle vans will be available to bring you to downtown State College for dinner or sightseeing. The PSU Radiation Science and Engineering Center will also hold tours of our facility, including our recently-upgraded control console and beam laboratory. I look forward to reconnecting with everybody in person and hearing about developments at each of your facilities.

As a reminder, there are several opportunities to participate or provide feedback on various NRC

initiatives. After a multi-year hiatus, the NRC has again begun to consider options for rulemaking to codify post-9/11 security enhancements for special nuclear material. In the past, many NPUFs submitted robust sets of comments due to the potential impact that this rulemaking may have on our facilities. Now that the NRC is again considering this rulemaking, it is important for our community to re-engage and ensure that the final outcome is beneficial and palatable. We also expect the NRC to release a draft revision of NUREG 1478 for comment this summer. Please be sure to review the proposed revision and provide comments to ensure that the new document meets the needs of your facility. You can also choose to make your voice heard by participating in TRTR initiatives, such as the development of a new 50.59 guidance document for digital I&C being drafted by Steve Reese.

I would like to conclude my comments by

TRTR NEWSLETTER - Q2 2022

congratulating Robert Dwyer of UNM on being this year's recipient of the Tawfik Raby Memorial Scholarship. The pool of applicants was exceptionally strong this year, but Robert stood out due to his participation in various types of nuclear research, reactor operations, and his apparent zeal for nuclear science. Thank you to all of the university reactor administrators who took the time to share the scholarship announcement with your students.

Regards,

Jeff Geuther, Chairman

LETTER FROM THE EDITOR

Greetings TRTR Community!

We are excited to share our classically themed newsletter. We particularly enjoy our Know More Nukes logo! If you would like to own this logo on a limited edition drink tumbler, please send an email with your favorite cartridge game to trtrnewsletter@isotopictopics.com. We will select a random winner from the entrants on July 7, 2022.

In this issue, we track previous special inspection reports to look for trends. Fortunately, these inspections are infrequent in the TRTR community. So let's keep up our commitment to safe, secure and reliable operations!

Continue to stay safe and healthy. As always, reach out with any themes for upcoming newsletters.

Best regards,

Amber



Amber Johnson
Editor



Luke Gilde
Content Editor



14 percent of Finland's total electricity consumption. [\[More\]](#)

TRANSMUTEX DEVELOPING A NUCLEAR REACTOR POWERED BY A PROTON BEAM

A Swiss-based nuclear energy company, Transmutex, is developing an accelerator driven reactor designed to generate electricity from spent fuel. [\[More\]](#)

REACTORS CAN BE MONITORED USING SEISMIC AND ACOUSTIC DATA

Researchers at Oak Ridge National Laboratory have developed a method to use seismic and acoustic data recorded 50 meters away from a nuclear reactor (the High Flux Isotope Reactor), to predict whether the reactor was in an on or off state with 98% accuracy, and estimate its power levels, with about 66% accuracy. [\[More\]](#)

RADIUM GIRLS AIDED BY NIST TRAINED SCIENTIST

Elizabeth Hughes, a NIST trained scientist, played a key role in the lawsuit of former employees of the US Radium Corporation against the company in 1928. [\[More\]](#)

FINAL 2022 SCIENCE BUDGET APPROPRIATIONS COMPLETED

Appropriations legislation for fiscal year 2022 has been completed. Funding for the Versatile Test Reactor project has been zeroed out, but the budget includes "sufficient funding" to support the restart of the NIST Center for Neutron Research reactor. [\[More\]](#)

UMASS LOWELL LICENSE RENEWED

The NRC has issued a renewed operating license for the University of Massachusetts Lowell Research Reactor. UMass Lowell applied for the license renewal in 2015. [\[More\]](#)

SITE WORK BEGINS FOR CANADIAN SMR

Work has begun to prepare

the site of Ontario Power Generation's (OPG) Small Modular Reactor project. The site is the only one in Canada with an accepted environmental assessment and site preparation license. OPG hopes to complete a BWRX-300 SMR by 2028. [\[More\]](#)

INSIDE NC STATE'S NUCLEAR REACTOR

The NC State Pulsar reactor was profiled by WRAL News. [\[More\]](#)

OLKILUOTO 3 EPR PLANT BEGINS ELECTRICITY PRODUCTION

Olkiluoto's third nuclear power plant started up on 21 December 2021, and began producing electricity on 12 March 2022 and is expected to reach full output in July 2022. Once full output has been reached, it will produce about

HIGH FLUX REACTOR RESUMES OPERATIONS

The High Flux Reactor (HFR) in Petten, the Netherlands has resumed operations after an unplanned outage in mid-January due to a water leak in the cooling system. The HFR is one of the largest producers of medical isotopes, and the shutdown has led to a shortage of needed medical isotopes, such as Mo-99, Tc-99m, Lu-177 and I-131. [\[More\]](#)

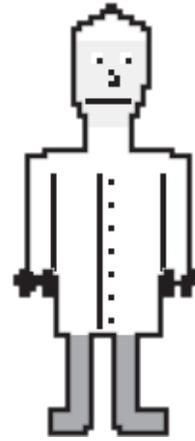
THE STABLE SALT REACTOR

Moltex Energy is attempting to commercialize the Stable Salt Reactor (SSR). The SSR uses a molten salt contained in fuel tubes (similar to a standard reactor fuel element), cooled by a separate molten salt. Moltex believes the design holds several advantages over standard Molten Salt Reactors. [\[More\]](#)

ADVANCED TEST REACTOR OVERHAUL COMPLETE

An 11-month outage for a core overhaul at the Advanced Test Reactor has been completed. The outage is required every 10 years to complete the Core Internals Changeout. [\[More\]](#)

Reactor Operator



Ensure that the core safely approaches criticality.

WORLD'S FIRST DEEP GEOLOGICAL OPENS IN FINLAND

The world's first Deep Geological Repository for nuclear waste has opened in Finland near the Olkiluoto Nuclear Power Plant. [\[More\]](#)

DIABLO CANYON NUCLEAR POWER PLANT TRANSFORMED MARINE LIFE

The warm water released by the Diablo Canyon Nuclear Power Plant has had significant impacts on the local marine life. [\[More\]](#)

USNC TO WORK WITH REED COLLEGE ON COMMERCIAL RADIOISOTOPE HEATER

Ultra Safe Nuclear Corporation has reached an agreement

with Reed College to irradiate material in the Reed Research Reactor for the company's first-of-its-kind commercial radioisotope heater. [\[More\]](#)

CONSTRUCTION PERMIT ISSUED FOR NEW CZECH RESEARCH REACTOR

The Czech Technical University (CTU) in Prague has been issued a construction permit to build the VR-2 Subcritical Reactor. The new subcritical reactor will be used for teaching nuclear engineering students and will be located in the same building as the VR-1 Research Reactor. [\[More\]](#)

MARGARET MELHASE FUCHS, DISCOVER OF CS-137

The story of the discovery of Cs-137 by Margaret Melhase,

an undergraduate chemistry student at the University of California, Berkeley in 1941.

[\[More\]](#)

KAERI TO BUILD NEW RESEARCH REACTOR

A consortium led by Daewoo Engineering & Construction has been selected to build a new 15-megawatt research reactor in South Korea. [\[More\]](#)

IMPERIAL COLLEGE CONSORT REACTOR DECOMMISSIONED

The Imperial College Consort Reactor, the last operational research reactor in the UK, has completed decommissioning following its 2012 shutdown. [\[More\]](#)

US MILITARY PLANS TO BUILD MOBILE NUCLEAR REACTOR IN IDAHO

The U.S. Department of Defense plans to build the Project Pele mobile nuclear reactor prototype. [\[More\]](#)

PURDUE AND DUKE ENERGY EXPLORE SMALL REACTOR

Purdue University and Duke Energy have announced plans to explore the possibility of using a Small Modular Reactor to provide power to the campus. [\[More\]](#)

KAZAKH RESEARCH REACTOR CONVERTED TO LEU

The IVG.1M in Kazakhstan has been restarted following its conversion from HEU to LEU fuel. IVG.1M was originally built in 1975 as a gas cooled reactor, and in 1990 was converted to water cooling. [\[More\]](#)

B REACTOR REOPENS FOR PUBLIC TOURS AT HANFORD

The Hanford B Reactor is being reopened for tours following a nearly 2 year closure due to the COVID-19 Pandemic. [\[More\]](#)

MCMASTER UNIVERSITY AND ULTRA SAFE NUCLEAR CORPORATION TO STUDY DEPLOYMENT OF MICRO MODULAR REACTOR

McMaster University, Ultra Safe Nuclear Corporation, and Global First Power will explore the possibility of deploying a Micro Modular Reactor at McMaster University or an affiliated site. [\[More\]](#)

DECISION TO BUILD VERSATILE TEST REACTOR TO BE MADE SOON

The Department of Energy will soon decide whether to build the 300-MWth Versatile

Test Reactor (VTR). The final environmental impact statement for the VTR was recently completed. [\[More\]](#)

JAPAN APPROVES RELEASE FUKUSHIMA WASTEWATER

Japan's nuclear regulator has approved plans to begin releasing the wastewater stored at the site of the Fukushima Daiichi nuclear power plant into the ocean. More than 1 million tons of water contaminated with tritium are being stored on the site and will be released through an undersea tunnel approximately 1 km offshore. [\[More\]](#)

WESTINGHOUSE PARTNER PENN STATE TO EXPLORE SMALL REACTORS

Penn State and Westinghouse announced plans to explore the possibility of building Westinghouse's eVinci Microreactor at Penn State. [\[More\]](#)

MARVEL ENGINEER YASIR ARAFAT PROFILE

Yasir Arafat, the leading developer for the MARVEL Microreactor at INL was profiled. MARVEL has been developed in a very short time, with the project beginning only in June 2020. [\[More\]](#)

NRC INSPECTIONS

MISSOURI UNIVERSITY RESEARCH REACTOR:

November 1-4, 2021. The inspection included a review of operator licenses, requalification, and medical examinations, experiments, organization and operations and maintenance activities, review and audit and design change functions, procedures, fuel movement, surveillance, and reportable event follow-up. Three Severity Level IV violations were identified for violations of dose rate limits in public areas, failure of a control blade, and failure of a pressure transducer. MURR's corrective actions for these violations were found to be acceptable, and the violations are not being cited. The complete inspection report is [ML21322A341](#).

UNIVERSITY OF NEW MEXICO AGN-201 REACTOR:

January 31 – February 3, 2022. The inspection included a review of organization and staffing, operations logs and records, requalification training, surveillance and limiting conditions for operations (LCOs), experiments, committees, audits, and reviews, emergency planning, maintenance logs and records, and fuel handling logs and records. One Severity Level IV violation for the failure of a control rod to scram properly. UNM's corrective action for this violation was found to be acceptable, and the violation is not being cited. The complete inspection report is [ML22046A200](#).

OHIO STATE UNIVERSITY RESEARCH REACTOR:

October 19-21, 2020. The inspection included a review of procedures, experiments, health physics, design changes, committees, audits and reviews, and transportation. No violations were identified. The complete inspection report is [ML20315A007](#).

February 28 – March 3, 2022. The inspection included a review of organization and staffing, operations logs and records, requalification training, surveillance and limiting conditions for operation (LCO), emergency planning, maintenance logs and records, and fuel handling logs and records. No violations were identified. The complete inspection report is [ML22070B094](#).

OREGON STATE UNIVERSITY TRIGA REACTOR:

February 7 - 10, 2022. The inspection included a review of security compliance. One Severity Level IV violation was identified, but is not being cited. The inspection notification is [ML22056A237](#).

February 7 - 10, 2022. The inspection included a review of organization and staffing, operations logs and records, requalification training, surveillance and limiting conditions for operation (LCO), experiments, emergency planning, maintenance logs and records, and fuel handling logs and records. No violations were identified. The complete inspection report is [ML22062A489](#).

DOW TRIGA RESEARCH REACTOR:

February 28 – March 2, 2022. The inspection included a review of organization and staffing, operations logs and records, procedures, requalification training, surveillance and limiting conditions for operation (LCO), committees, audits and reviews,

maintenance logs and records, and fuel handling logs and records. No violations were identified. The complete inspection report is [ML22070B086](#).

TEXAS A&M UNIVERSITY NUCLEAR SCIENCE CENTER AGN-201 REACTOR:

August 30 – September 1, 2021. The inspection included a review of staffing and audits, operator requalification and active license status, radiological surveys, surveillance, and emergency preparedness. No violations were identified. The complete inspection report is [ML21266A414](#).

PENN STATE BREAZEALE REACTOR:

March 29 - 31, 2022. The inspection included a review of security compliance. No violations were identified. The inspection notification is [ML22102A242](#).

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY RESEARCH REACTOR:

March 28 - 30, 2022. The inspection included a review of security compliance. No violations were identified. The inspection notification is [ML22098A223](#).

GE HITACHI NUCLEAR TEST REACTOR:

February 28 – March 3, 2022. The inspection included a review of organization and staffing, operations logs and records, requalification training, surveillance and limiting conditions for operation (LCO), emergency planning, maintenance logs and records, and fuel handling logs and records. No violations were identified. The complete inspection report is [ML22102A227](#).

MCCLELLAN NUCLEAR RESEARCH CENTER:

January 10-13, 2022. The inspection included a review of effluent and environmental monitoring, experiments, organization and operations and maintenance activities, review and audit and de-

sign change functions, procedures, radiation protection, and inspection of transportation activities. No violations were identified. The complete inspection report is [ML22048B756](#).

REPORTABLE EVENTS

EVENT #55914

A reportable occurrence occurred at the University of Utah Training Reactor on 5/24/22 when a damaged fuel element was identified during a fuel inspection. The element was seen to have surface pitting and was discolored. As it was moved, bubbles began to emerge from the element, so the fuel cladding was believed to have failed. No elevated radiation levels were observed, and the element was removed from service. [\[More\]](#)

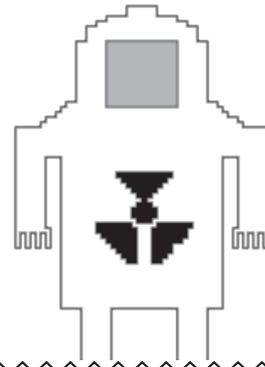
FOLLOW UP TO EVENT #55747

A Technical Specification violation occurred at the NC State Pulsar Reactor on 2/17/22 when one of the power channels dropped to a reading of 20% while the reactor was operating at 95%. A follow-up report ([ML22061A034](#)) was prepared and submitted on 3/1/2022. NC State performed extensive testing on the channel and was unable to replicate the problem. The performance of all components was verified and the reactor was restarted without the issue recurring.

FOLLOW UP TO EVENT #55739

A reportable occurrence occurred at the Ohio State Research Reactor on 2/15/22 when a required exhaust fan failed during operations when a conduit carrying its power was accidentally cut through while a sink was being replaced. A follow-up report ([ML22060A104](#)) was prepared and submitted on 2/24/2022. Ohio State repaired the fan, is considering adding an indication of the fan's status in the control room, and adding precautions to procedures to discourage cutting or drilling into the reactor bay floor while operating the reactor.

SPECIAL INSPECTIONS



NIST (2021)

A Special Inspection was performed from February 9, 2021 – March 16, 2022 in response to an apparent Safety Limit violation leading to partial melting of a fuel element and release of fission products. The NRC identified 7 apparent violations related to exceeding the fuel temperature Safety Limit, emergency planning, and unauthorized changes to the facility. NIST has not yet been granted approval to restart the reactor. [\[More\]](#)

PURDUE (2020)

A Special Inspection was performed from October 27 – November 6, 2020 to investigate the operation of the Purdue Research Reactor above its maximum licensed power level following the installation of the new control system. 2 violations were identified and categorized as a Severity Level III problem. [\[More\]](#)

RINSC (2012)

A Special Inspection was performed at the Rhode Island Nuclear Science Center from October 26-27, 2011 to follow up on an event that led to a worker receiving a dose of approximately 2.5 Rem. The worker entered a dry irradiation room after the reactor core had been moved adjacent to the room and the dose rate was approximately 30 rem/hr. This was determined to be a Severity Level

IV violation, but was not cited as RINSCs corrective actions were deemed appropriate. [\[More\]](#)

NC STATE (2011)

A Special Inspection was performed at the NC State University Pulstar Reactor to follow up on a technician entering a neutron radiography cave with a shutter open while the reactor was operating and being exposed to dose rates of approximately 30 rem/hr. Additionally, the technician was not wearing dosimetry. This was determined to constitute 2 Severity Level IV violations, but was not cited as NC State's corrective actions were deemed appropriate. [\[More\]](#)

K-STATE (2010)

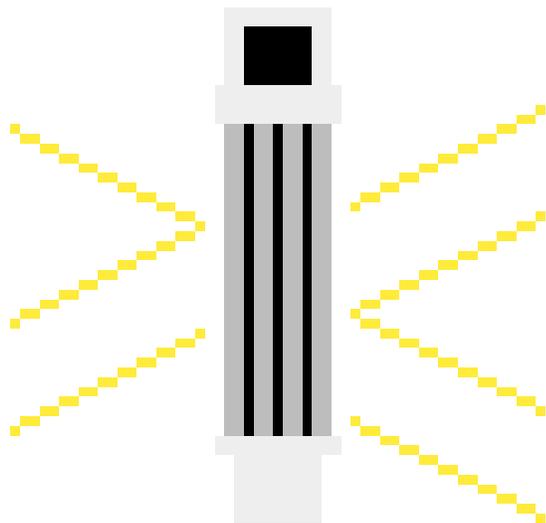
A Special Inspection was performed at the Kansas State University TRIGA Reactor to investigate the circumstances of an event leading to unexpected high dose rates in excess of 20 rem per hour. Irradiated oil samples were removed from the reactor pool resulting in unexpectedly high dose rates in excess of 50 rem per hour. A Severity Level III violation was issued for failure to perform required surveys and issue proper dosimetry to personnel. [\[More\]](#)

MIT (2007)

A Special Inspection was performed at the MIT Nuclear Reactor Laboratory to investigate the circumstances which lead to an employee receiving an unexpected whole body dose of approximately 4 Rem during the third quarter of 2007. This dose was found to result primarily from silicon doping operations at the facility. 2 Severity Level IV violations were issued for failure to perform required surveys and failure to provide proper training to personnel issued dosimetry. [\[More\]](#)

TEXAS A&M (2006)

A Special Inspection was performed at the Texas A&M Nuclear Science Center to investigate the potential extremity overexposure to a worker. The event was not determined to be an overexposure, but it was found that the worker had failed to follow procedures. A Severity Level IV violation was determined to have occurred for failed to make required surveys. [\[More\]](#)



QUARTERLY CALL SUMMARY

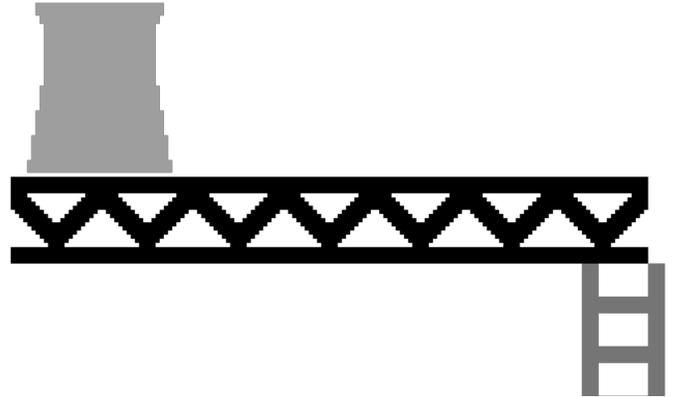
May 24, 2022 3:00-4:00 pm EST

- Be on the lookout for the FY23 Operating Examinations Request.
- Important to get your request on the schedule
- Operator applications are needed 30 days before the exam to allow for processing and possible review by the Medical Reviewing Official.
- Collaborative Learning Environment is in the initial stages of testing as a possible replacement for the paper version of the written exam. Contact your examiner for more information.
- NUREG-1478 draft revision expected to be available for comment this summer. Planning on a 60 day comment period followed by a public meeting to address comments prior to final revision issuance.
- Target to have the backlog of operator certificates issued by mid-June. Signatures were difficult to obtain during the pandemic.
- NPUF rulemaking is still with the commission.
- Discussed how best to track trends and lessons learned. Please contact the executive committee with your thoughts.
- Reg Guide 2.8 regarding the implementation of 10 CFR 50.59 at NPUFS was issued in February. Looking forward to continuing the collaborative working environment with the I&C addendum. Please contact Steve Reese with your comments.

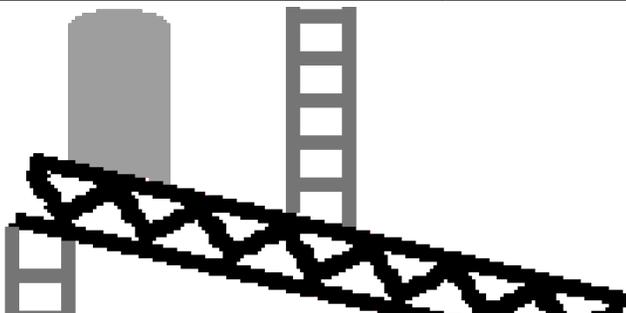
[ML22139A173](#)

PART 73 RULEMAKING

On June 1, 2022 the NRC held the second meeting this year to gather comments regarding their development of a Commission paper regarding enhanced security for special nuclear material. Public meeting slides ([ML22151A165](#)) present the current options under consideration for this potential rulemaking. The options are re-printed here for your review:



Major Topic 1 Physical Protection Of Unirradiated SNM	Option 1	Status Quo
	Option 2	Resume 2015 rulemaking
	Option 3	Update regulations only for Cat II SNM
	Option 4	Revise regulations for Cat I/II to be more performance-based; revise regulations for Cat III
Major Topic 2 Physical Protection Of Irradiated SNM	Option 5	Status Quo
	Option 6	Revise regulations on physical protection of irradiated SNM, including SNF and HLW
	Option 7	Revise regulations to include physical protection requirements for significant quantities of ANM
	Option 8	Revise regulations to increase “self-protecting” radiation threshold above 1 Gy/hr



Comments were previously submitted by TRTR and various facilities in 2014. Those can be found by referencing the Docket ID [NRC-2014-0118](#). Please review the information and let the executive committee know the anticipated impacts to your facility.

EVENTS



EUROPEAN RESEARCH REACTOR CONFERENCE (RRFM) 2022

June 6-10, 2022
Budapest, Hungary

[More information](#)

AMERICAN NUCLEAR SOCIETY ANNUAL MEETING

June 12-16, 2022
Anaheim, CA, United States

[More information](#)

U.S. WOMEN IN NUCLEAR

July 25-27, 2022
Richmond, VA, United States

[More information](#)

INTERNATIONAL CONFERENCE ON NUCLEAR RESEARCH REACTORS

September 16-17, 2022
Rome, Italy

[More information](#)

INTERNATIONAL CONFERENCE ON RADIATION SHIELDING

September 25–29, 2022
Seattle, WA, United States

[More information](#)

TEST, RESEARCH AND TRAINING REACTOR (TRTR) ANNUAL CONFERENCE

October 11-14, 2022
State College, PA, United States

[More information](#)

INTERNATIONAL CONFERENCE ON TOPICAL ISSUES IN NUCLEAR INSTALLATION SAFETY: STRENGTHENING SAFETY OF EVOLUTIONARY AND INNOVATIVE REACTOR DESIGNS

October 18-22, 2022
Vienna, Austria

[More information](#)

2022 ANS WINTER MEETING AND TECHNOLOGY EXPO

November 13-17, 2022
Phoenix, AZ, United States

[More information](#)

CONFERENCE ON NUCLEAR TRAINING AND EDUCATION

February 6-9, 2023
Amelia Island, FL, United States

[More information](#)

KNOW MORE NUKES



Massachusetts Institute of Technology

Sara Hauptman - Reactor Engineer / Senior Reactor Operator



What year did your reactor first go critical?

MITR-I first achieved criticality on July 21st, 1958. The reactor was later redesigned as MITR-II, which had its first criticality on Aug 14th, 1975.



What is the reactor license number? Power level?

License R-37, for operation up to 6.0 MWth



What is your position at the reactor? How long have you held that position?

I started training as a student in November of 2015, got my RO license a year later, and my SRO in April 2018. In December 2020 I took over the responsibilities of Reactor Engineer.



Have any major changes/modifications, such as conversion, power upgrade, etc..., been done?

In my time at the NRL I have seen several equipment and system upgrades, including our cathodic protection system, emergency battery bank, and digital nuclear safety system. We are now one

of only two reactors in the entire US that has a digital nuclear safety system.



What is a unique feature of your reactor?

In the reactor backyard we have a small rabbit population that lives underneath our main airlock. Every spring you get a chance to see a few new baby “reactor bunnies”.

Previous page: An overhead shot taken of the blue reactor containment dome in the middle of MIT's campus. Right: Sara Hauptman loading a natural uranium fuel slug into the graphite exponential pile.



What is a fun fact about your reactor?

The site of our reactor used to be Kraft-Phenix cheese storage warehouse back in 1956 (yes, like the boxed macaroni). Until an electrical upgrade project finished this year, we had a circuit breaker that was still labeled "Kraft Building".



What is the biggest challenge facing your reactor?

Like many other reactors we also deal with the challenge of aging equipment. Piece by piece we have successfully been able to upgrade and replace major systems, but it's an ongoing process that requires a lot of time, money, and personnel effort. It does lead to some interesting juxtapositions in our control room. For example, our shim levers that are original to MITR-I (1958) are right below a modern touch screen display of linear flux.



What is the most unusual request someone has had to use your reactor?

We routinely irradiate samples of toenails for neutron activation analysis as part of an undergraduate intro to nuclear science class. It's great to have the opportunity for students to use facilities at our lab, but I'm also very glad I don't personally have to handle those samples.



What drew you to your current position?

When I was an undergrad, I got involved in some research projects with a previous Reactor Engineer. I worked on neutronic modeling of the subcritical graphite exponential pile we have at the NRL for my senior thesis. The prior experience with MCNP led to me getting involved with fuel management in 2020. After having been on the operator side for several years, it was quite exciting to see behind the uranium curtain.



What has been your favorite project?

In 2019 I was able to get involved in the development of a digital twin simulator for the MITR. It was really interesting to do a bunch of beta testing on a laptop that looked just like the main reactor console. It was beyond thrilling to do a “reactor startup” at x10 speed. The whole experience actually made me very impressed with the physical reactor design because the safety system constraints made it genuinely hard to “break” anything during testing.



Bottom: Sara Hauptman holding a Geiger counter, standing in front of the viewing window to the basement medical room.

Top: A visiting tour group of high school students are being guided through power manipulations on the MITR Simulator by Sara Hauptman.



Before working at your reactor, what was the most unusual or interesting job you’ve ever had?

Back in high school I spent two summers working at an amusement park. I was in the food services group and spent many days as a bored 15-year-old making cotton candy for the entire park and going home smelling like blue raspberry sugar (a much preferable type of contamination in my opinion).



What do you find the most challenging at your reactor?

Honestly, not overcommitting my time. I want to be involved in more projects than I really have bandwidth for. I can’t help it if everything sounds exciting to work on.



What advice would you give to new reactor operators?

I always tell the new student trainees that there are no questions too stupid to ask and no one will ever be upset at you for needing help, especially as you’re learning the ropes. In my first month of training, as a college freshman with no industrial background, I asked my supervisor if “sump” was slang for “suction pump”, so yeah, no question too stupid to ask.....



What are three career lessons you’ve learned thus far?

Avoid the trap of “well we’ve just always done it this way” when a procedure doesn’t seem to make sense. You can catch a lot of opportunities for improvement or for learning something new by questioning things. Write EVERYTHING down. Clear communication and accurate information are worth their weight in gold. If you aren’t sure about something, do not be afraid to reference official documentation; we keep hard copies of those around for this exact reason.



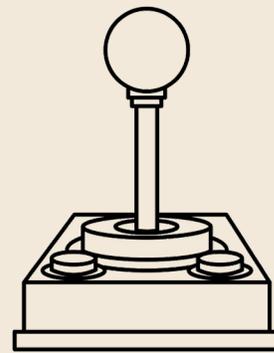
Anything else???

It’s been 6 years (roughly 24 outages) and I still think looking down in the core tank at the Cerenkov glow around the fuel is one of the coolest things I get to do.

REACTOR CORE

By TRTR

VIDEO GAME CARTRIDGE SYSTEM NOT RECOMMENDED FOR USE
IN ANY CONSOLE.



Can you save Reactor Operator's core from the grip of Inquisitor Isotope?

Inquisitor Isotope has relocated Reactor Operator's core to the top of a cooling tower! It is up to you to help Reactor Operator save the core before the fuel runs out and the research stops. But it won't be easy to keep the research going! Inquisitor Isotope will do everything allowed by the Atomic Energy Act of 1954 as amended to stop you. They will throw moderator barrels, cooling towers, consoles, anything within reach. So if you are looking for fission, don't leak out of this core!

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