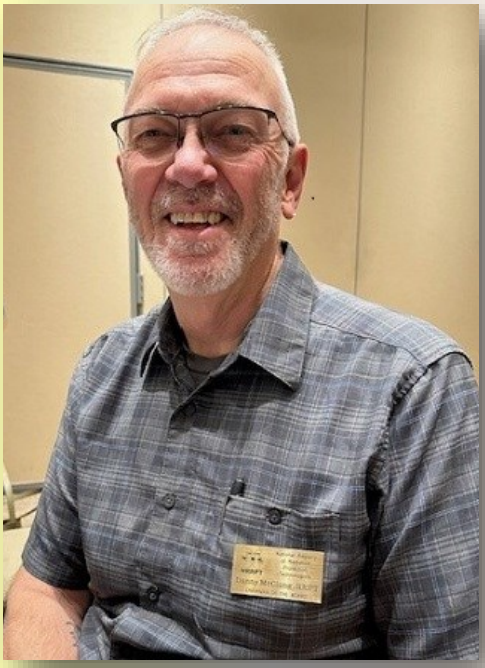
The NRRPT NEWS

OFFICIAL NEWSLETTER of the *National Registry of Radiation Protection Technologists*

October 2024 **Incorporated April 12, 1976**

Chairman's Message



Chairman Danny McClung

Greetings fellow RRPTs!

Hurricane season is almost over!

Fellow RRPTs; welcome to another edition of the NRRPT newsletter. We are nearly a month into the fall season, and it got down to almost 60 degrees in Central Florida last night! As we begin to enjoy all the great things fall has to offer us (sports, Halloween, Thanksgiving in the US, and the Joyous Holidays before the New Year), please take time to remember those impacted by the horrible devastation of Hurricanes Helene and Milton. I'm sure we all know people who have suffered tremendous personal loss due to these catastrophic weather events. Let's keep them in our hearts and reach out to help as we can.

I'd like to welcome the 43 new RRPTs who passed the August 2024 US exam. This officially brings the total number of RRPTs to 6038 (another milestone achieved)! Good luck to those of you taking the upcoming Canadian exam on November 19th! I will continue to encourage each one of you, both old and new to the NRRPT, to become involved. The NRRPT is YOUR organization. We only exist to serve you. Anyone who wishes to become part of the Exam Panel, please contact me or our Executive Secretary, DeeDee McNeill, and we will get you set up. We need a diversity of individuals, geographic locations, and work experiences. This diversity is a big part of the exam's ACE accreditation. You can use the credits earned from the NRRPT exam to help finish your college degree.

We had a great turnout of Board and Panel members at the summer meeting in Orlando, FL. NRRPT met in conjunction with HPS and the IRPA 16

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Contacts

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International Congress. We met a lot of interesting radiation protection folks from all over the world. Because Orlando is a good place to stay indoors in July, lots of good work was accomplished by your Board and Exam Panel. We did, of course, take time for a night out of fun, and honors for some special members. Pictures are included for your enjoyment.

I will close with this update to the Chairman's agenda as discussed in the previous newsletter.

1. Go live with the online NRRPT exam. We have 3 US exams securely loaded with the vendor. It won't be long until the online exam is a reality.

Until next time,
Danny McClung
NRRPT Chairman of the Board

2. Re-start work on an international exam. We talked to international RP professionals at the Orlando meeting to get the word out. There is interest in several countries. We had a fellow RRPT recently travel to the UAE, where there was previous interest in a "certification exam" for their personnel. I hope to have some good news soon. With the growing interest in nuclear power worldwide, NRRPT will continue to press this initiative.

3. Continue promoting radiation protection as a great opportunity for work. Keep getting the word out! It's becoming harder for employers to find qualified personnel to work. We welcome your ideas and will listen to what you have to say about the future of the NRRPT.

Welcome New NRRPT Members

Congratulations to the following individuals who successfully passed the Canadian **NRRPT** Examination on December 19, 2023:

Chris Asselin
Bradley Bolger

Congratulations to the following individuals who successfully passed the USA **NRRPT** Examination on February 24, 2024:

Michael Albanese
Jason Ashbocker
Austin Bailey
Amber Bolen
Keith Chartier
Liyen Chen
Keyna Collingham
Karah Dann
Mark Ellis
Angiolo Ferrigno
Kent Fisher
Keith Gilbert
James Gouldthorpe
Timothy Higginson
Matthew Hill
Shiloh Johnson
Veronica Kerl
Daniel Koerner
Douglas Mallory
Zachary Matthews
Alissa Moore
Tatiana Nasierowski
Justin Nichols
Jason Olsen
Aaron Otterstein
Bal Parajuli
Sam Paterniti
Michael Peck
Brock Robison
John Roemer
Christopher Sanchez
Daniel Schoen
Michael Stanfield
Matthew Vaughan
Colby Watt

Radioactive Consumer Goods - Items Identified Around New York State

By Paul Armani

I would like to present a few of the items that have been identified around New York State. The material has been found at both remediation sites and landfills. Each has presented unique problems for proper handling and disposal. For reference, we currently have 500 notifications from fixed radiation portal monitors across the state. Each brings a unique opportunity to utilize skills obtained and developed for studying for the National Registry of Radiation Protection Technologists (NRRPT) exam, radiochemical analysis, and field experience. The material has been disposed of through multiple approved waste streams including the Source Collection and Threat Reduction (SCATR) program through the Department of Energy (DOE).

Items Identified

Radium Military Gauges , Dose Rate: ~150 µrem/hr on contact

Radium Static Eliminators, Dose Rate: ~800 mrem/hr @ 30 cm

Radium Compass, Dose Rate: ~6 mrem/hr on contact

NRRPT Night-Out in Orlando, FL
July 7, 2024

***** Thank you to our generous NRRPT Night-Out sponsor — Ameriphysics *****

Tom Hansen (Ameriphysics) and family

Night-Out Presentations—NRRPT Chairman Award

Awards Chairman Kelli Gallion-Sholler presents Past Chairman Rick Rasmussen with the NRRPT Chairman Award

****** He liked it! *****

Night-Out Presentations—NRRPT Humm Award

Awards Chairman Kelli Gallion-Sholler and Past Chairman Kelly Neal present Dr. Tom Johnson with the NRRPT Arthur F. Humm, Jr. Award. This award is given to persons who have given outstanding support to the NRRPT. Thank you Dr. Johnson!

Thomas E. Johnson, PhD

Night-Out Group Photos

Our leader: Danny McClung
NRRPT Chairman of the Board

Back to Business!!

Exam Panel (and Board members) hard at work

South Korean Flight Crew Member Workers' Compensation Award

By Christopher Royce

I read about a South Korean Workers Compensation award to a flight crew member who had gastric cancer. The compensation claim was related to cancer perceived to be resultant of radiation exposure at his job. What do you think, gang? I think it's a slippery slope and we really need to sharpen up our dosimetry programs. And as usual we are failing to educate the public about radiation.

I saw this and immediately had to dig around. South Korea's workers' compensation group found on behalf of an aircrew member's representative that his death was a result from cancer related to radiation exposure during flights. The airline states the crew member received less than the country's regulatory limit for air crew of 6 mSv or 600 mrem per year. At 53, he contracted gastric cancer, and lawyers successfully argued causation of the cancer from occupational radiation exposure in workers compensation court Stomach cancers can be related to radiation exposure and from a regulatory standpoint we adopt the Linear No Threshold (LNT) model. Whether as a scientist you believe in LNT or are more of a hormesis believer, LNT is the regulatory stance. Many times, persons with other cancers receive treatments at nearly 10,000 times the aforementioned dose values and gastric cancers were not easily documented as causation in studies.

Whether the cancer was a result of the exposure is not a point I am not trying to argue. We need to consider how this affects our own regulatory agencies. Are low dose exposures more likely to be related to the LNT probability of cancer? Resulting in more workers compensation for radiation exposures? Cancer rates are not dropping among our overall population. Deaths from cancers are dropping.

Will monitoring requirements need to be reduced? The Nuclear Regulatory Commission (NRC) requires dose monitoring when workers may reasonably receive 500 mrem in a year or 10% of the limit. Most hospital programs require As Low As Reasonably Achievable (ALARA) investigations at 125 mrem and 375 mrem per quarter. At those numbers, most interventional fluoroscopy operators will exceed the Korean plaintiff's dose. Now consider, American Nuclear Insurers (ANI) like to see persons monitored at 100 mrem per year. I'm reminded of more than one meeting where ANI communicated most litigation was for claims where workers or members of the public received less than 100 mrem exposures in a year.

I remember working at a facility where I calculated we could save nearly $50k/year in removing erroneous dosimeters from our operations. Many government agencies could save more. Most workers I know that have dosimeters get minimal reporting doses, less than 1 mrem per read on their dosimeters. I'm sure this might be true at your facilities. I've also worked with an organization that relied on calculations to verify dose was less than the monitoring limit. Many facilities that work with radiation at non licensed facilities are governed by the Occupational Safety and Health Administration (OSHA) and might not have a dosimetry program at all. Naturally Occurring Radioactive Material (NORM) and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) exposures likely go unmonitored as well.

I'm from Louisiana and last few times I've gone home, I've seen billboards on Highway 90 for lawyers trying to attract clients that work in the oil and gas industry to file NORM exposure claims. This Korean lawsuit is not isolated to Korea and not to the airline industry.

Maybe we need to consider this an education issue. Not of the workforce, but of the public. Professionally and personally, it's hard to relate these low doses to cancer. Especially considering all the other factors in a worker's life that lead to cancer. As a citizen, I remember my introduction to radiation safety or lack thereof was on the Simpsons. Homer was a terrible safety manager and while it's parody, we know parody has root in reality with a twist of public perception. Our public generally does not trust radiation and I know at times they don't trust the safeguards of our industry.

This Korean airline event happened a year ago (2023). What's your opinion? Do you think we have a concern for similar litigation and monetary awards in the US? Will this affect our dosimetry programs? Are we just failing at education of the public? (I know the answer to the last question.)

Here are a few links I pulled while reading you may have interests in:

Korean Exposure case:
https://www.koreatimes.co.kr/www/nation/2024/10/113_362654.html

Korean citations for exposures:
https://www.koreatimes.co.kr/www/nation/2024/10/113_352687.html

NOAA Flight dose information for the Polar Route:
https://www.swpc.noaa.gov/sites/default/files/images/u33/LEE%20SWW%202010.pdf

IAEA Cosmic and Space Radiation Brochure:
https://www.iaea.org/sites/default/files/20/11/rasa-cosmic.pdf

NIH Paper on stomach cancer relationship to cervical cancer treatment:
https://pmc.ncbi.nlm.nih.gov/articles/PMC3831516/

Suggested changes for stochastic and deterministic status of cancers:
https://pmc.ncbi.nlm.nih.gov/articles/PMC4100010/

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RAD MOVIE REVIEWS!

(actual movie poster)

Man Made Monster (re-released as The Atomic Monster in 1953) is a 1941 science fiction horror movie. Lon Chaney, Jr. makes his horror debut in this flick. Lon Jr. is the son of famed silent film star Lon Chaney (think *Hunchback of Notre Dame* and *Phantom of the Opera*).

My favorite dialogue occurs just 6 minutes into the film:

"This theory of yours isn't science, it's black magic.

I believe that electricity is life. That men can be motivated and *controlled by electrical impulse supplied by the radioactivity of the electrons."*

Thank God that no one has figured out how to control us with radioactivity!

Good ole Dr. Paul Rigas (Lionel Atwill, seen right) wants to create an army of electro-biologically-driven zombies after hearing about Dan McCormick's (Lon Chaney Jr., seen left) miraculous survival of a bus accident. It seems the bus hit a high power line and Dan survived it because he was immune to deadly electricity (is that like deadly plutonium?).

(poor old Dan)

(the mad Dr. Rigas)

Dr. Rigas treats poor Dan with so much electricity that his mind is ruined and he is left dependent upon addicting electrical charges. Of course, Dan gets the touch of death and is able to kill anyone by electrocution.

Another character Dr. Jon Lawrence (Samuel S. Hinds - think of Peter Bailey, father of Jimmy Stewart in *It's A Wonderful Life*) tries to stop the horror. Of course, Dan kills him. Of course, Dr. Paul gets Dan arrested and tried for murder. Of course, Dan goes to the electric chair.

It all breaks loose when Dan survives his execution. Dan goes on to kill some other characters and eventually he dies too – ran out of electrical juice.

Pretty good special effects for the time – you have got to love the movie sets!

(Dr. Jon Lawrence)

The late Peter Darnell, RRPT, CHP, amateur movie critic

25 Years + as an RRPT

The following members were registered 1994

ABBOTT, JR., JOHNNIE W.
ADAMS, MICHAEL L.
ADAMS, PATRICK E.
ADAMS, RICHARD W., CHP
ADAMS, ROY R.
ADAMSON, KERRY F.
AGEE, JR., DEAN P.
AKINS, DANNY W.
ALBERTIN, SYLVIA M.
ALESSI, JEFFERY L.
ALLEN, JANICE L.
ALTVATER, JR., FREDERICK W.
ANDERSON, JERRY L.
ANDERSON, TOMMY L.
ANDREWS, DAVID F.
ARTINO, CHARLES J.
BAKER, DAVID J.
BALLARD, SHAWN M.
BARNHART, KENNETH S.
BARSTOW, JAMES
BARTON, NORMAN C.
BAYLESS, MARK A.
BEAN, CURTIS K.
BEDENBAUGH, WILLIAM M.
BEER, ERIC A.
BEINSTEIN, ROBERT M.
BEMENT, JOHN S.
BENNETT, JAMES E.
BERG, ROBERT R.
BERNARDIN, KENNETH A.
BERTRAND, PAUL A.
BIANCO, SCOTT A.
BILBREY, ROBERT (BOB) E.
BINGHAM, JACK (JOHN) D.
BLANKENBILLER, GUY W.
BLOTZER, CARY L.
BONNER, CHRISTOPHER M.
BONNER, JR., JOSEPH J.
BOYCE, DAVID C.
BRADLEY, SHANE
BRAVO, FRED
BRIGGS, DELBERT H.
BRINKLEY, DAVID S.
BROWN, KEVIN G.
BROWN, RICHARD E.
BRYANT, RAY A.
BRYANT, YVONNE Z.
BUJNICKI, KENNETH M.
BURCH, MICHAEL R.
BURDICK, JONATHAN M.
BURROWS, LOREN R.
BUSH, T. SHANE
CAPLETTE, PAUL M.
CARTER, JOHN R.
CHANCE, TRACY D.
CHAPPELL, WILLIAM J.
CHERKO, LAURA M.
CHRISMAN, JEROME P.
COBB, JR., JAMES T.
COFFMAN, KARL E.
COLEMAN, DANNY L.
COLEMAN, THOMAS H.
COMINGS, WILLIAM E.
CONSOLVO, ANN C.
COOPER, GARY L.
COSTELLO, RICHARD
COUFAL, SCOTT A.
CRAFT, THOMAS W.
CRAWFORD, DAVID R.
CROW, JANA
CROWLEY, GEORGE M.
CURRIER, JAMES R.
CURWICK, DAVID A.
DARNELL, CHARLES E.
DAVIS, JEFFREY L.
DAVIS, RICHARD J.
DAVIS, RICHARD L.
DEAN, SLAMAN S.
DEGROODT, JR., JERRY L.
DEMARINIS, JOSEPH M.
DENNIS, JR., JAMES A.
DENULLY, ANTHONY E.
DEVINE, PHILIP M.
DICK, WILLIAM E.
DICKINSON, TERRANCE J.
DIX, CHARLES F.
DOUGHERTY, MICHAEL J.
DRURY, ERNEST R.
DUFFERT, HUNG (MIKE) V.
DUNNAVANT, JR., JAMES W.
DUPAQUIER, JAMES C.
DYEKMAN, DALE L.
EATON, GERALD L.
ECKHARDT, REGINALD L.
EICHENBERGER, STEVEN S.
EICHORST, A. JEFFERY
ELDER, MARIE A.
ELDRIDGE, S. JOHN
ELLIOTT, JOHN W.
ENGEBRETSON, RICHARD A.
ESLING, SCOTT J.
FASSELL, JOHN G.
FERGUSON, AARON P.
FERGUSON, JR., LARRY R.
FESSENDEN, ROGER L.
FISCHER, MARC A.
FISHER, STEVEN L.
FLORA, JASON T., CHP
FOOS, STEVEN L.
FORLINES, WILLIAM
FOSTER, MICHAEL
FRALIX, TIMOTHY J.
GARY, ROBERT S.
GATELY, DANIEL M.
GEIGER, ROBERT J.
GILE, DANIEL J.
GLANTZ, JOEL M.
GOUGH, JOHN , CHP
GRACE, DANNY R.
GRAHAM, JAMES J.
GRAHAM, JEFFREY H.
GRAHAM, JOHN S.
GRAY, ALAN W.
GREEN, DONALD K.
GREER, ROGER
GRIECO, ELSIE R.
GRIFFIN, SCOTT M.
GRIFFITH, VICTOR J.
GRIGSBY, ALAN
GROVE, THOMAS W.
GUNNINK, D. STEVEN
GUTHRIE, TOM E.
GWISE, THOMAS E.
HAAS, GEORGE A.
HAGERMANN, GARY D.
HAGGARD, TERRY D.
HAMMACK, JEFFREY S.
HAMMACK, JULIE M.
HANEY, KELLEY M.
HANNA, STEVEN M.
HARDGRAVE, LEONARD E.
HARRELL, JOHN A.
HARTELIUS, KEVIN C.
HATMAKER, JAMES H.
HEARTY, BRIAN P.
HEINZ, DWIGHT C.
HELLER, LORIS H.
HENDRICKS, LISA N.
HENRY, JOSEPH B.
HETZER, BRIAN A.
HILDEBRANDT, GERARD O.
HILL, JOHN A.
HINCKLEY, FRANK L.
HOBBS, D. CRAIG
HOCKER, ROY R.
HOLCOMB, ROBERT (DEWAYNE)
HOLLEY, CLARENCE C.
HOMER, DAVID E.
HOOLAHAN, EDWARD
HOPKINS, TODD E.
HOUSE, BRIAN W.
HOWIE, STEPHEN D.
HUCKABA, CHARLES H.
HULKE, MARK W.
HUMBLE, STEVEN M.
HUMPHREY, MONICA M.
HUMPHRYS, II, DEAN W.
HUNT, TRAVIS D.
HYDE, MICHAEL F.
IRWIN, RUSSELL R.
JACOBS, RONALD D.
JAEGER, FREDERICK H.
JAMES, RUSSELL F.
JEAN, ROLAND
JOHNSON, ALLEN
JOHNSON, DAVID J.
JOHNSON, JEFFREY T.
JOHNSON, MICHAEL L.
JOHNSTON, THOMAS P.
JONES, JERALD F.
JONES, SUSAN E.
JONES, TIMOTHY L.
JUNG, RUSSELL W.
KACZOR, MARK A.
KAMERMAN, JAMES W.
KANADY, RALPH WAYNE
KANTER, SETH J., CHP
KAZYAKA, DAVID A.
KELTON, GRADY
KELTON, GWENNA A.
KENNEDY, STANLEY P.
KERNS, FRANKLIN C.
KINGTON, ANNE P
KINIRY, KEVIN A.
KINMARK, MICHAEL L.
KIRK, JONATHAN H.
KIRKPATRICK, RICHARD J.
KOBIEROWSKI, MITCHELL S.
KOPSICK, STEVEN P.
KOVACH, MICHELLE A
KOVALCIK, ROBERT D., CHP
KRAFT, JOHN J.
KRECHEL, BRAD
KUCHAR, ARDIS K.
KURTZ JR., JERRY E., CHP
LANCELOT, TRENT E.
LAWSON, C. ALAN
LEESER, FRANK T.
LEHNHARDT, JOHN R.
LEITNER, KAREN A.
LEPAGE, TRENNA M.
LIEBERMAN, KENNETH B.

LININGER, MARTY
LIVESEY, LEE M.
LOCH, JR., CHESTER T.
LOPEZ, JULIE J.
LOUCKS, LANCE E., CHP
LOVE, JR., RALPH A.
LUCTERHAND, KENNETH L.
MACKENZIE, MALCOLM (MACK)
MADDER, MARK E.
MADDREY, JR., DENNIS A.
MAGES, ROBERT
MAINE, LORRAINE L.
MAINE, TED E.
MANIS, JAMES K.
MARKS, MICHAEL W.
MARSHALL, GLENN R, CHP
MASTRIONA, KEVIN L.
MATHES, STEPHEN J.
MAURICE, JOSEPH O.
MAYNARD, DAVID L.
MCAVOY, KELLY D.
MCCALL, CHARLES W.
MCCALL, WILLIAM J.
MCCARTHY, JR., RAYMOND J.
MCDONNELL, JAMES P.
MCGINLEY, PAMELA K.
MCHUGH, MARK G.
MCKENNA, CHARLES J.
MCNUTT, JR., ROBERT E.
MELLGREN, SHAWN O.
MERCER, THOMAS L.
MEYERS, RAYMOND L.
MICHAUX, DONNA V.
MIKKELSON, DONALD W.
MILES, KIRK S.
MILHAM, TERRY W.
MILKS, II, ROBERT L.
MILLER, JAMES R.
MILLER, VINCE D.
MILLER, WADE F
MILLER, WILLIAM F.
MINNICK, DAVID A.
MIZE, BRIAN D.
MOORE, JOANN E.
MORGAN, WILLIAM J.
MORRISON, GARY M.
MOSS, SHERRILL J.
MURPHY, MICHAEL P.
MURPHY, PATRICK W.
MURRAY, RANDALL P.
MYERS, JUDY A.
NANCE, JEFFERY A.
NEESER, JONAS L.
NETTLES, GERALD M.
NEWMAN, DARRELL W.
NICKELS, THOMAS W.
NORMAN, DAREN R.
NORWOOD, JEFFREY D.
NYSWANER, RICHARD L.
O'KEEFFE, MICHAEL J., CHP
OSBORNE, SAMUEL D.
PALMER, ROBERT T.
PALMER, THOMAS G.
PANSEGRAU, DUANE M.
PARLATORE, LINDA M., CHP
PARSONS, DAVID R.
PATRICK, BRIAN D.
PEIRCE, ROBERT D.
PEREZ, ALFREDO S.
PETERSON, JULIE A.
PETIT, TIMOTHY J.
PILMAIER, TIMOTHY D.
PITCHFORD, WILLIAM P.
POINTON, SCOTT R.
POLK, EDWARD L.
POPPELL, TIMOTHY L.
POSTON, CLARENCE C.
POWELL, J. BRUCE
PRICE, B. KEITH
PRICHARD, STEVEN J.
PULEO, MICHAEL A.
RASMUSSEN, RICHARD G., CHP
RATLIFF, EARL G.
REAVY, CHRISTOPHER R.
REDMON, CHRISTOPHER M.
REECE, KEITH A.
RESSLHUBER, BARBARA J.
REUST, JACK L.
REYNOLDS, JAMES R.
RIDLEY, JAMES S.
ROBINSON, RONALD J.
ROGERS, TIMOTHY J.
ROHNER, ROBERT J.
ROHR, WILLIAM H.
ROMINE, JOHN L.
ROOK, MARK A.
ROTCHFORD, JOHN E.
RUBICK, L. MAXINE
RUDMANN, JOSEPH G.
RUSSO, TERESA M.
SALLING, DWAIN B.
SALYER, RANDELL L.
SANKEY, PATRICK
SARGE, JAMES C.
SAWTSCHENKO, STEVE
SCHAU, RAYMOND A.
SCHLAG, JR., JOHN C.
SCHNEIDER, KEVIN M.
SCHOLTENS, WILLIAM A.
SCHOUT, MARK A.
SCOTT, KEVIN P.
SEEHAUS, LOTHAR K.
SHASHATY, EDWARD J.
SHERMAN, CHARLES E.
SHIELDS, III, MATTHEW
SHIRLEY, JEFFREY S.
SHIVELY, ERMEL D.
SHORT, WALTER T.
SHORTELL, GREGORY
SIEGELMAN, LORI L.
SILER, JOEL E.
SIMMONS, GEORGE R.
SIMONTON, RONALD J.
SMETTS, THOMAS K.
SMITH, JEFFREY L.
SMITH, THOMAS A.
SMITH, JR., N. CONRAD
SNYDER, STEVEN C.
STANKEWITSCH, BRIAN T.
STARKWEATHER, DONALD R.
STEELE, ROLAND B.
STEINMEYER, WILLIAM A.
STERN, SCOTT D.
STRICKLIN, BENTON V.
STURGIS, PAUL A.
SUDNAK, PAUL J.
SUNDAY, SHELDON C.
SUNDERMAN, CHRIS K.
SURCHIK, MARK T.
SWANSON, COLIN H.
SWEET, MICHAEL L.
TABER, MICHAEL A.
TALPAS, EMILY A.
TARANTINO, CARL A., CHP
TAYLOR, JEFFREY M.
TEASLEY, III, N. ALLAN
THEIS, MARK T.
THIELEN, THOMAS R.
THOMPSON, DAVID J.
THORVALDSON, TIMOTHY J.
TOZZIE, ROBERT J.
TREAT-AMSTEIN, TINA P.
TROCCOLI, ROBERT
TRUITT, MITCHELL M.
TRUSIAK, JR., CARL A.
TUELL, LARRY C.
TULLEY, GREGG W.
TURNER, DENNIS L.
TYSINGER, DALE E.
TYSON, RANDALL S.
VAN BAALEN, MARY G.
VAN UNEN, MATHEW D.
VANDERHORST, MARC W.
VEAL, TIMOTHY A.
VERELLE, CHARMLYN C.
VIGIL, PATRICK NATHAN
WAGGONER, JOHN E.
WAGGONER, STANLEY D.
WALKER, W. WAYNE
WARD, JOHN D.
WASNIAK, LEN P.
WASSELL, TIMOTHY D.
WATKINS, STEPHEN R.
WEISS, LAURA B.
WENDLING, MARC A.
WILKES, EDWARD B., CHP
WILLIAMS, CHARLES R., CHP
WILLIAMS, SCOTT R.
WILLIS, CURTIS T.
WILSON, PAUL A.
WILSON, RUSSELL S.
WILSON, SIDNEY K.
WILWERDING, MARK S.
WINDERS, HUBERT E.
WINSOR, DANNY D.
WIRTHS, JAMES C.
WOLFE, WILLIAM H.
WOOLDRIDGE, ED K.
YOUNG, WILLIAM C.
YURKON, KATHRYN A.

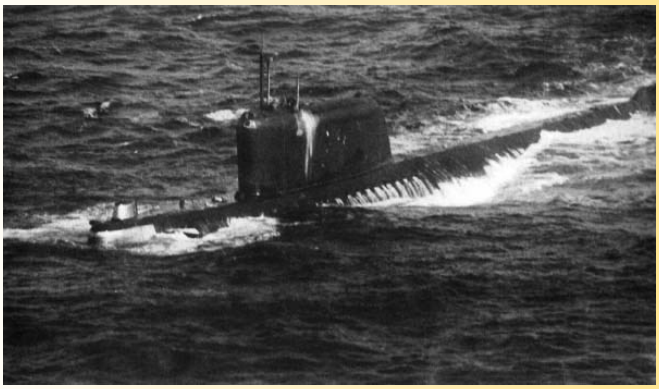
Please contact the Executive Secretary if you have a

"Greater than 25 Years as an RRPT" story to share!

Executive Secretary—DeeDee McNeill—nrrpt@nrrpt.org

NRRPT BLAST FROM THE PAST!

Good evening Mr. and Mrs. NRRPT, from border to border and coast to coast and all the ships at sea. Let's go back in time…



K-19 (Wikimedia)

The Date: July 4, 1961

The Event: Loss of coolant accident with no place to run.

The Place: North Atlantic Ocean

The Cause: K-19 construction began in 1958 and was completed on November 12, 1960. Construction was rushed because the Russians wanted a submarine fleet to rival the United States. This was Russia's first ballistic-missile nuclear submarine. The submarine had three ballistic missiles. The Captain of the K-19, Nikolai Zateyev, thought that the submarine was unfit for combat and the K-19's sea trials (July-November of 1960)

Juliett 484 wreck in the Providence, RI River, August 2026 (AP)

The Setup: The K-19 began its first patrol in June 1961. On July 4, 1961 a leak developed during reactor start-up testing. A pressure gauge malfunctioned and the pressure test reached 400 atmospheres (atm) – double the design pressure. The crewman in charge of the test failed to report the incident so no repairs were made.

The Accident: The primary coolant leak was in the pressure regulating system. A sudden drop in pressure tripped one of the 2 reactors and initiated emergency core cooling systems. But, these systems were never installed because of the rush to complete construction.

With no cooling, the reactor water boiled. Temperature of the reactor room raised above 280° F and a fire was discovered in the reactor compartment. The crew, wearing raincoats and gasmasks entered the reactor compartment to fix the leak. The crew jury-rigged a cooling system from the drinking water supply. This prevented a meltdown or explosion. Instead of accepting help from a US Navy ship, the K-19 crew remained aboard and eventually evacuated to a Russian diesel submarine. The K-19 was never boarded by the US Navy until after the cold war ended.

The Aftermath: Members from the crew received lethal exposures of 50 to 60 Sieverts. The 7 men that entered the reactor compartment died within days of returning home. Another 20 men died, also from radiation exposure. The K-19 reactor compartment was rebuilt, the boat returned to service, and had another reactor accident in 1972.

After the cold war, the Russians sold the *Juliett 484.* That boat became a vodka bar and the eventual set for the movie *"K-19: The Widowmaker."* The rumor was that the Russians nicknamed the K-19 *"Hiroshima"* because of the deaths to crew members. No military honors were awarded the crew that perished – the *Hero of the Soviet Union* medal was reserved for combat veterans.

The late Peter Darnell, RRPT, CHP, after-the-fact reporter

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