FSP:

- Simulating the discharge of fire suppressant agent (Halon alternatives).
- Transmitted on a CD-ROM.
- Research funded by NIST: Dr. Richard Gann as the director of Next Generation Fire Suppression Technology Program and Dr. William Grosshandler as Program Director from NIST.

library@nist.gov: Response from librarian Keith Martin

"I forwarded your request for the FSP software to NIST's Fire Research Division. They may contact you directly, or if not I will let you know as soon as I receive a response from them.

In the meantime I was able to locate a discussion of the FSP in NIST Special Publication 1069 "Fire Suppression in Aircraft". On page 732 it states that the FSP code is a modified version of the Nuclear Regulatory Commission's RELAPS5 program, and that a detailed description of the code can be found in two NRC documents:

RELAP5/MOD3 code manual: Code structure, system models, and solution methods. Volume 1

https://www.osti.gov/scitech/biblio/105079/

RELAP5/MOD3 code manual: User's guide and input requirements. Volume 2

http://www.iaea.org/inis/collection/NCLCollectionStore/_Public/27/008/27008530.pdf

Don't know if these are of help or not.

By the way, your company's address brought back some memories for me. I grew up in Cranston and remember often going with friends to the bowling alley across the street from your office.

Let us know if we can be of any further assistance.

Keith Martin

Librarian

National Institute of Standards and Technology

100 Bureau Drive, Stop 2500

Gaithersburg, MD 20899-2500

Phone: 301-975-2789

Email: keith.martin@nist.gov"

NIST Public Affairs Office: "Please contact Jiann Yang at (301) 975-6662."

inquiry <inquiry@nist.gov>

Dr. Richard Gann (director of Next Generation Fire Suppression Technology Program):

richard.gann@nist.gov

"Thank you for your interest and sorry to be slow in responding – I was on vacation.

Dr. Jiann Yang can provide you with further information on the software, and I am copying him on this reply.

Richard G. Gann, Ph.D.

Senior Research Scientist Emeritus

Fire Research Division

Engineering Laboratory

National Institute of Standards and Technology

Mail Stop 8665

Bldg. 224, Room A-261

Gaithersburg, MD 20899-8665

Phone: 301-975-6866

Fax: 301-975-2091

E-mail: rggann@nist.gov

I am only at the lab about two days per week and will respond to messages at those times."

Jiann Yang (Deputy Chief of NIST Fire Research Division):

Yang, Jiann C. Dr. (Fed) <jiann.yang@nist.gov>

 "You may want to contact Dr. Mott at the Naval Research Laboratory. I believe he got FSP running on the recent Window platform. david.mott@nrl.navy.mil"

"My last contact with Dr. Mott was in 2015. I did send him an e-mail after my recent e-mail to you but have not received any reply from him. Dr. Mott and his team at NRL made FSP run on the current Window platform."

David Mott (Naval Research Laboratory): No response.

david.mott@nrl.navy.mil

Professor Kemal Tuzla (Lehigh University): Forwarded to Ramu Sundaram (DE&S)

kt01@lehigh.edu; rksundaram@aol.com

"Professor Tuzla passed on your request to me.

To provide some background, the FSP Program was jointly developed by Lehigh University and Duke Engineering and Services (DE&S) in the late 1990s. Basically, the code development work was done at DE&S and the experimental verification was done at Lehigh. I managed the DE&S work. We transmitted the code to NIST in 2000 along with a final project report, and also held a workshop at NIST. We had considered starting a user group at that time, but our company was in transition, and it was not possible to pull something together. In any case, DE&S was sold around 2000 and people who worked on it moved on. I had thought about resurrecting the code, but never did.

So, with regard to your request, I may be able to help, but I'll have to do some digging. I'll get back to you with what I find within about a week. If you don't hear from me in a week, please feel free to get in touch with me. E-Mail would be the best option."

"I didn't forget about you. I did find my old box full of code-related material, but I'm not sure what I have. I've been going through it and trying to put it on my computer and having problems. Now I'm waiting for one of my former colleagues to provide some help. I am going to keep at it, but I'm afraid to make any promises.

While I'm looking at it, let me ask you this - what is your intention with this code - do you want to run it as it is, or do you want to modify it? That will help me in my research.

In any case, I'm happy to tell you what I know about the code and give you what information I have. Also, since you are either at Brown or at Cranston, it would be easy for us to meet. I live only about 45 minutes north, in Grafton, MA, and I go to Providence fairly regularly."

TFA/TFHAL/FLONET:

- FLONET seems to be a simpler technique of TFA and TFHAL, but not sure about the difference of TFA and TFHAL.
- https://www.nist.gov/sites/default/files/documents/el/fire_research/R0000201.pdf
- https://www.nist.gov/sites/default/files/documents/el/fire_research/R0301017.pdf

MPR Associates

info@mpr.com

Reply from Gallagher, Paul <pgallagher@mpr.com>

"Unfortunately, MPR is not in a position to share the source code for these programs.

Paul Gallagher

Vice President, Business Development

MPR Associates, Inc.

320 King Street

Alexandria, VA 22314

703-519-0248 (Office)

609-558-7299 (Mobile)"

HFLOW:

- https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19850007392.pdf
- https://www.nist.gov/sites/default/files/documents/el/fire_research/R0000181.pdf

JPL Library

Reply from Honchell, Mickey G (2731) <mickey.g.honchell@jpl.nasa.gov>; on behalf of; library <Library@jpl.nasa.gov>

"This work was done in 1984. None of these people are still here.

Also the work was done for the US Army. I would not have the first idea where to look.

You might try DTIC."

Hughes Associates: Another fire protection company

COMP:

- http://dtic.mil/dtic/tr/fulltext/u2/a196184.pdf

NUWC:

Jandron, Michael <michael_jandron@brown.edu>

"I actually know all three (two authors and reviewer). But they all retired within the last 10 years! What I can do is ping the library at NUWC though to see if (a) they have the source code, and (b) it is ok to send out. I'll get back to you."

"Hey they got back to me and said they didn't even have it on file, they had to download it online like you. They don't have the source code unfortunately.

Sorry man, let me know if there is anything else I can help with."

"I could if you really needed it, but the issue is that even if someone did have it (you're talking 35 year old fortran code) - it would have to go through the public release cycle before it could be sent out. I think you'd be better off developing it from scratch. The departments listed on the report no longer exist so it would be a chase to find the files."