



Risk assessment and mitigation in research grant applications – A researcher's perspective

Professor Sunil Bisnath, P.Eng.
Dept. of Earth and Space Science and Engineering
Lassonde School of Engineering

Research Commons: “A Safeguarding Research Overview and How-To:
Crafting successful risk assessments and mitigation strategies”

November 7th, 2024

CONTENTS

- My research
- Dealing with new research risk requirements in grant applications
- Thoughts and suggestions

My research

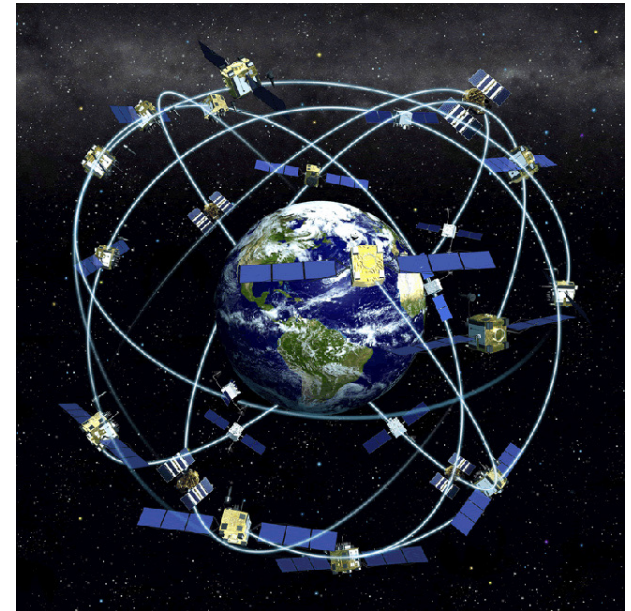


My research

- 19 years at Geomatics Engineering in Dept. of Earth and Space Science and Engineering, Lassonde School of Engineering
- Director: Global Navigation Satellite Systems Laboratory
- Interim Director: Mobility Innovation Centre (MOVE) ORU

- I work with GPS and other positioning and navigation systems, primarily improving measurement processing algorithms and applying to user applications

- Current research includes improving automotive and smartphone capabilities



My / the “problem”

- My research is the “problem”

- Simply put:
 - While I don’t work on military applications,
 - These technologies are all military developments and
 - Therefore, are all subject to risk assessment

- Perhaps the case for your research, especially under “dual-use” definitions

Dealing with new research risk requirements in grant applications



More work!

- Know your research: Determine if research falls under a risk category
(As risk is defined so broadly, its highly likely)
- Know your partner organization: Determine details about potential partners ownership and affiliations
(Sometime difficult to find information, but some warning signs are obvious)
- Risk identification: What is this?!
(Follow instructions; ask for help)
- Risk mitigation plan: Even more so, what is this?!?!
(Follow instructions; ask for help)

A specific problem

After doing her review, Rebecca's office sends Globe & Mail article:

Canadian-made parts found in Iranian attack drones used by Russia in Ukraine

STEVEN CHASE > SENIOR PARLIAMENTARY REPORTER

PUBLISHED DECEMBER 4, 2022

UPDATED DECEMBER 5, 2022

What is Research to do with such information?!?!

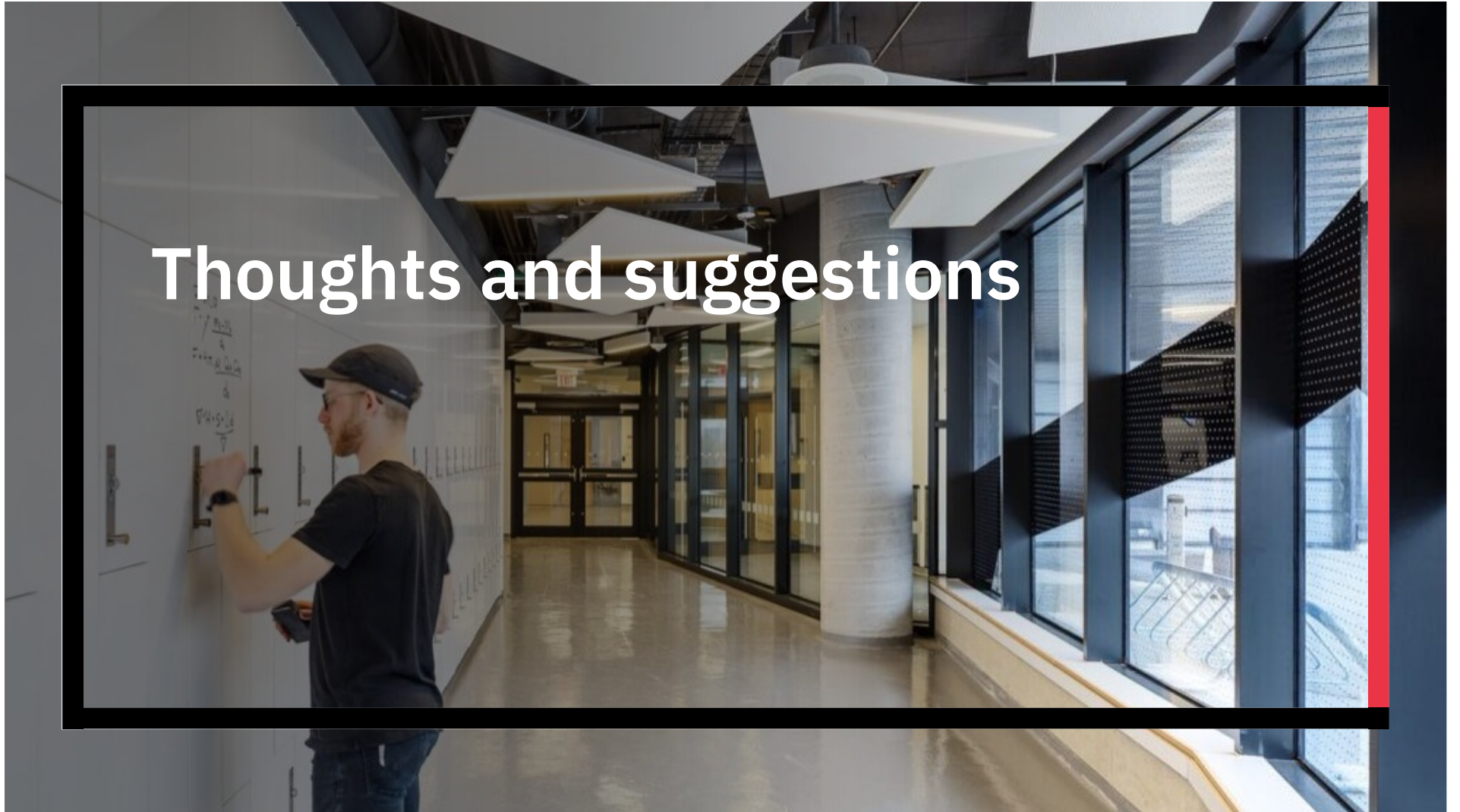
Does research require risk assessment?

- Again, probably yes
- Broad definitions provided
- Best to respond conservatively
- As with all grant applications, best to answer all questions directly

What is a risk mitigation plan?

- As with all grant applications, best to answer all questions directly
- Describing any other relevant review processes for which project has been subject to
- Raising research security awareness and building capacity across your research team
- Ensuring that partner organization(s)' objectives align with objectives of partnership
- Ensuring sound cybersecurity and data management practices
- Agreement on intended use of research findings

Thoughts and suggestions



Make use of available resources

- On-line instructions and tools
- Rebecca's office
- Faculty research office

On-line courses

- Worth stating in risk mitigation plan that Researcher will be / has taken research risk and mitigation webinars
- e.g., Public Safety webinars on safeguarding science, dual-use technologies, international students, exporting, etc.
- e.g., Tri-Agency webinars on sensitive research and affiliations

Ask for permission now and not forgiveness later

> Bad:

- More time needed to prepare grant (at least two additional forms)
- Additional documentation depends on type of grant – but typically additional material
- More work for Researcher (research, communications, writing, reviews, edits, etc.)

> But ...

- Not taking these new requirements seriously could result in grants being sent back
- Best to do the extra work, rather than complain / ignore / minimize it
- Same situation for various other grant requirements