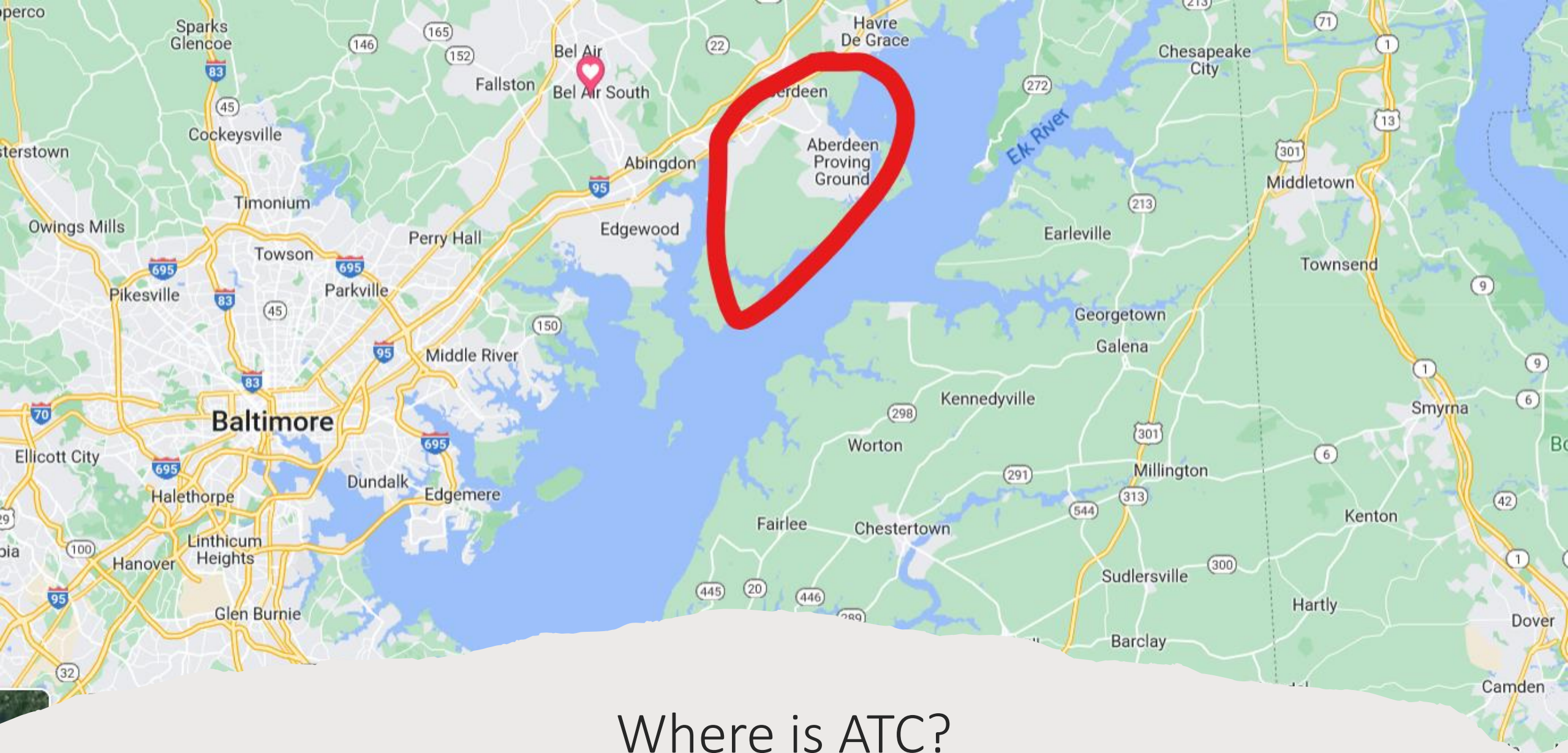


Test Technology/
Analysis Division/
High Performance
Computing
Branch

Janet Barry





Where is ATC?

Aberdeen Proving Ground

ATC is 79,000 acres about half the land owned or leased on APG



Our Mission

- Provide test and test support services for authorized customers within and outside of DoD, including Government and non-Government organizations, domestic, and foreign
- Perform comprehensive test and training, both real and simulated
- Develop leading-edge instrumentation and test methodologies



What does ATC really do?

- Everything a Soldier, Sailor, Airmen and Marine touches we test
- We work closely with the Army Evaluation Center who give ATC the test requirements
- Test the equipment so every time a warfighter needs it, it works

What does HPC Branch do?

- Analyze the terabytes of data from the field
- Make platforms for the forms that test officers use
- And make the data available to clients and decision makers



**JUST A REMINDER:
THERE IS NO "CLOUD"**



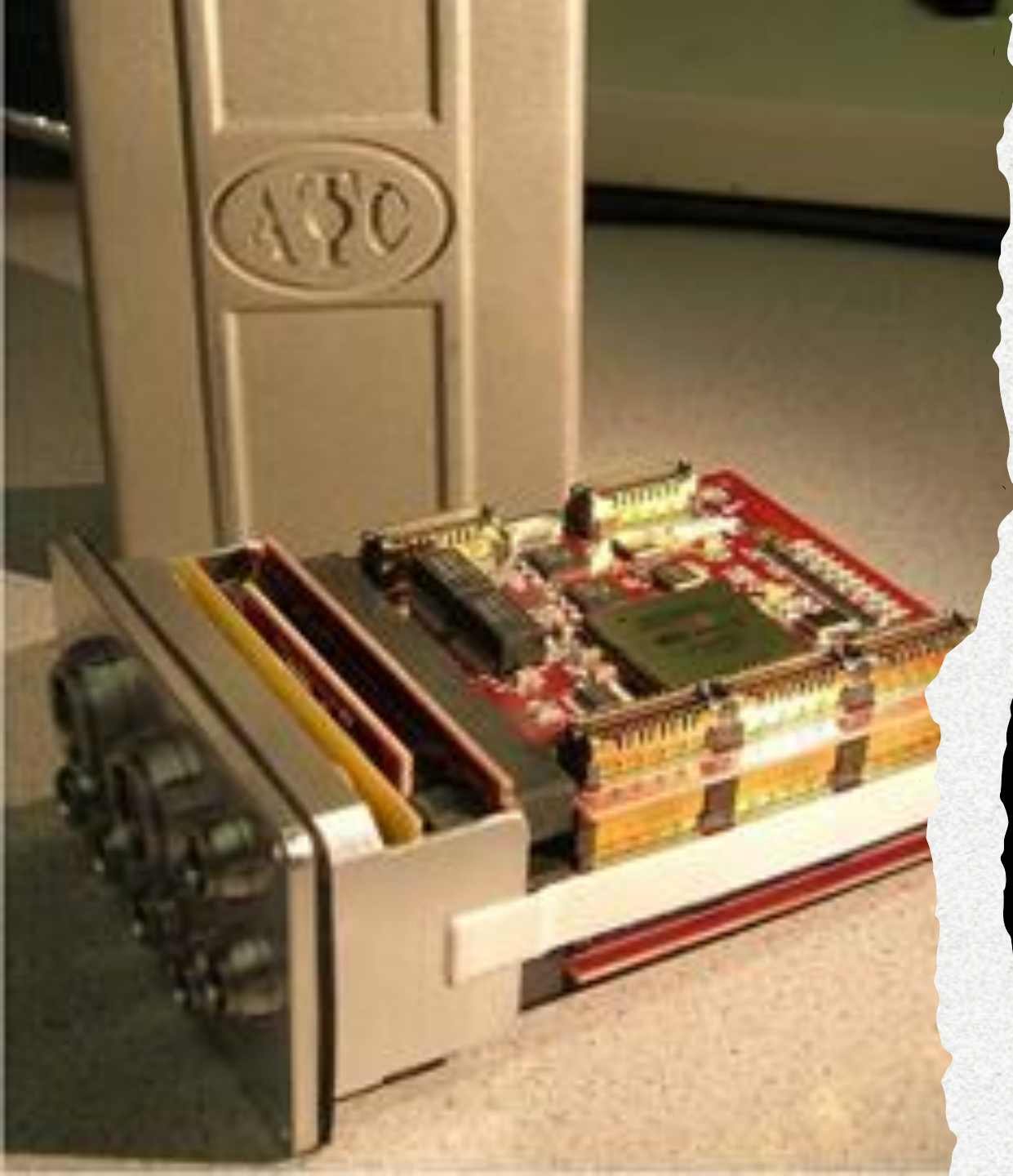
JUST "SOMEBODY ELSE'S COMPUTER"

Webservices

- I used C# and dot net
- Updated webservices from SharePoint to a locally hosted website
- Moved from dot net 3 to dot net 5
- A lot of my code won't get used because the goal now is cloud and online SharePoint

HOW WEB SERVICES WORK?





ADMAS

- Advanced Distributed Modular Acquisition System
- ATC's in-house data collector
- Can be changed for test to test to collect the relevant data for that test and the requirements for the equipment

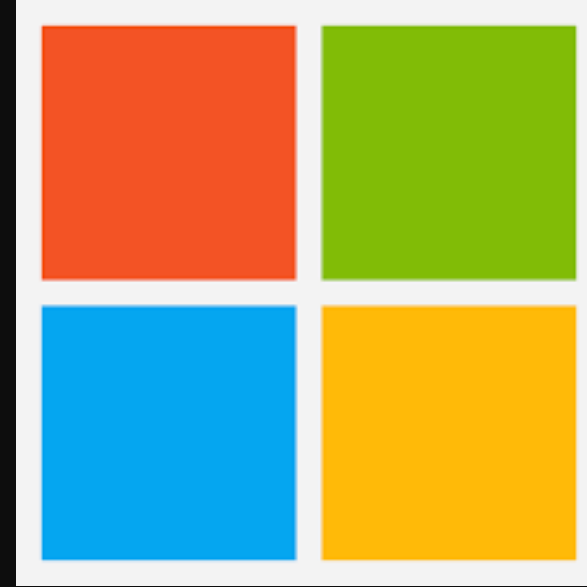


Testing and Student Events

- Learned about what everyone does at ATC
- Shot guns (M4, M4-100, Barrett M82)
- Climb on and in a few vehicles
- Went in a SEAL boat
- Saw some testing

Microsoft

- Worked with a team from Microsoft on our cloud environments
- In person and over teams
- First on making the cloud-based database and website
- Second working on autonomous vehicles





Seattle (JBLM)

- Supported Operational Test Command and Automotive Directorate
- Installed instrumentation on Strykers for the 40mm test
- And helped ensure the instrumentation worked

Challenges faced

- All the acronyms
- Learning a whole new programming language
- Learning a new framework
- Getting used to the more commercial way of coding





How SU Computer Sciences helped

- Database, because it was a project and we used code between the database and the website
- Software Engineering, with working with clients to make a product
- Systems Software helped, using Linux and backend coding



What did I learn?

- I need to play more video games
- How testing works for the army
- How to program in a more commercial setting
- Dot Net framework and C#



My Experience at ATC

- Overall I had a very positive experience
- I'm going to work there after I graduate
- The Student program there was very well done



Moving Forward

1 summer class (COSC 450)

Graduating from SU

Going back to work at ATC

VTAE (Virtual Test and Engineering) directorate

STAB (Software Test and Analysis Branch)