DEVELOPING A PROFICIENT WORKFORCE

BILL BURNETT

6 AUGUST 2020

HOW DO YOU TURN DATA INTO DECISIONS?

MISSION PLANNING: “IT’S KEY TO SUCCESS!”

EVERY VEHICLE IS AN ENVIRONMENTAL SENSOR.

A PARTNERSHIP WITH UNIV. OF SOUTHERN MISSISSIPPI FOR TRAINING.

TESTING AND TRAINING

“ALMOST ALL OF OUR TRAINING IS ON THE JOB.”

AND ALMOST ALL TESTING IS DURING OPERATIONS.

COMMAND AND CONTROL

A MARITIME OPERATIONS CONTROL CENTER:

“ONE CALL, THAT’S ALL!”

... AND UNMANNED VEHICLE CONTROL CENTER.

DEPLOY AND RECOVER

DATA

WE EVEN HAVE MOBILE “WAREHOUSE” CAPABILITY.

A SERIES OF AGREEMENTS HELPS US TO ASSIST AND RECOVER VEHICLES IN DISTRESS (OR LOST).

REPAIR/WAREHOUSE

RETREIVING DATA THAT IS ACCURATE AND HIGH QUALITY.
Questions for Presenters

Day 3

We are moving to a world of unmanned vehicles!

What lessons can we transfer from unmanned underwater vehicles?

We have more COLREGS issues with unmanned surface vehicles.

Working with appropriations to move an initiative forward, start with the need and the benefit...

...then, frame it in science, operations, industry, etc.

Engaging Congress via useful partnerships...

Congress listens to its constituents!

...so who could NOAA partner with in order to articulate the need?

Now is the time to think about budget requests!

With whom could NOAA partner to move toward better leverage of capabilities?

CENOTE: Navy-NOAA collaboration
WHERE DOES NOAA PLAN TO "SPEND THEIR CHIPS"?

CONSORTIUM FOR OCEAN LEADERSHIP

WORKFORCE

BREAKOUT GROUP #2

DAY 3: FACILITATED BY MONTY GRAHAM AND KATIE FILLINGHAM

LEADERSHIP DEVELOPMENT PROGRAMS

ACADEMIC PARTNERSHIPS

MENTORING

INTERNSHIPS

6 AUGUST 2020

EDUCATION and TRAINING

• SCIENTIFIC-TECHNICAL SKILLS
• COMMUNICATION SKILLS
• TECHNOLOGY SKILLS
• TEAM-BUILDING SKILLS
• ENTREPRENEURIAL SKILLS

IS IT A PIPELINE?...

... OR A FREEWAY?...

WHAT IS REQUIRED TO DO THE JOB?

WHAT'S TRANSLATABLE BETWEEN AERIAL and MARITIME?

"THE ENVIRONMENT has a lot to do with OPERATIONS, whether MANNED or UNMANNED..."

CERTIFICATION

"WHAT'S TRANSLATABLE " ONE SIZE DOES NOT FIT ALL!"

"SOME TRAINING IS SPONSORED and LED BY THE VENDORS and TAILORED to the SPECIFIC PRODUCT..."

"WHAT DOES CERTIFICATION ALLOW YOU TO DO?"

TRY EVERYTHING!

"BEGINNING WITH AWARENESS..."

"THERE'S A TERRIBLE LACK OF BUSINESS KNOWLEDGE!"

YOU NEED BUSINESS and TECHNICAL KNOWLEDGE...

DIVERSITY, EQUITY, and INCLUSION

WHAT ARE THE MULTIPLE PATHWAYS TO GETTING ENTREPRENEURIAL KNOWLEDGE?

WHO SEES THEMSELVES REPRESENTED?

WHO ARE WE HIRING?

... HOW DO WE RETAIN THEM and DEVELOP THEM?
Amplify the NOAA mission!

The best way to predict the future is to create it...

Your partners are your community is!

Innovation is coming from all directions... think about inclusion...

Find partners with whom you can co-create the future!

Focus on smaller projects...

- How to make contracting more efficient...
- While educating technical people on agile contracting.

It's about story...

- Learn better storytelling methods...
- Partner with/learn from Disney?

Include kids and students in your community, too!

- Engagement...
- Different constituencies...
- Make the enterprise interesting!
BUILDING A COMMUNITY OF PRACTICE

How do we include more people... in our experience?

Focused teams... a community of practice...
- Adaptive
- Resilient
- Continuous learning

Alignment with culture
Exchange programs
Measure value!

Focused teams... a community of practice...

Bill Burnett
Francisco Chavez
Chelle Gentemann
John Kreider
Jyotika Virmani

6 August 2020

Learn from history...
Develop/-acquire tools for distributed R+D/operations.

The more eyes on the data, the higher the quality.

Develop a close working relationship between R+D and operations.

Modelers... adaptive sampling... AI community...

Open, shareable data

Access to data is key to the utility of that data!

What can NOAA learn from other communities?

Regional vs. enterprise solutions?

Leverage other agency or private sector models and frameworks e.g. Decadal Survey

Non-gendered language “manned/unmanned vehicles” → “uncrewed”
Open science

Avoid confusion.