

Looking Back

What I Think I Learned

(1975 – 2005)

Dr. David P. Skinner

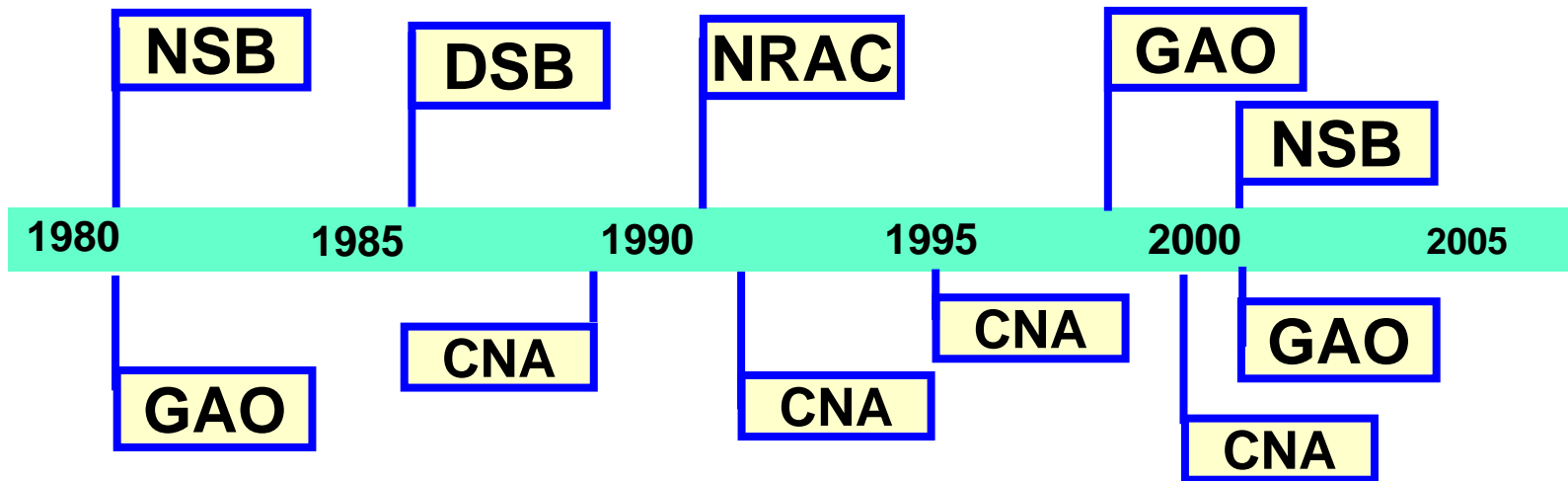
The opinions expressed herein are those of the author. All characters described herein are absolutely real. (Augustine's Laws are quoted from: "Augustine's Laws" by Norman R. Augustine, Viking Press, 1986.)

The Fundamentals Of the Problem Do Not Change

Fundamental Problems

- Operation in Cluttered & Noisy Environment
- Positive Identification Required
- The Surf Zone Is Neglected
- Area Coverage Rate Must Increase
- Threat Always Increases in Sophistication
(but the unsophisticated cannot be ignored)
- Platform Availability and/or Lift Are Critical Issue

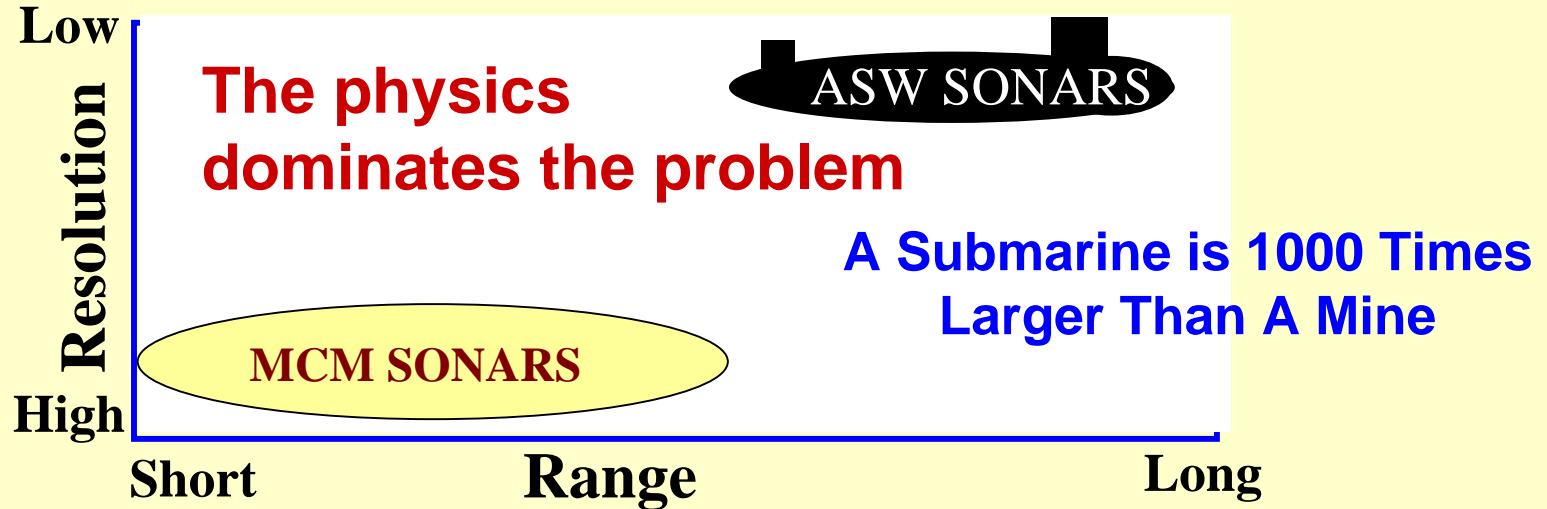
A Sample of Independent Assessments



Augustine's Law XXXII: Hiring consultants to conduct studies can be an excellent means of turning problems into gold -- your problems into their gold.

Ideas That Sound Too-Good-to-Be-True Are

- **Adaptation of ASW Sonars for Minehunting**



- **Broadband Versus Imaging Sonars**

Broadband (1948)

Bionic Sonar (1975-1978)

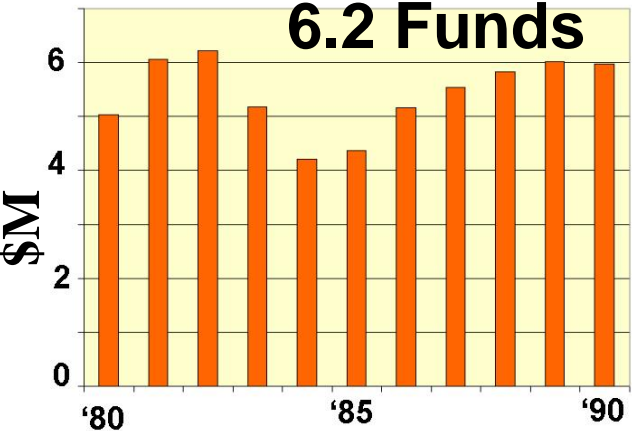
Resonances (1980-1990)

LFBB (1995-?)

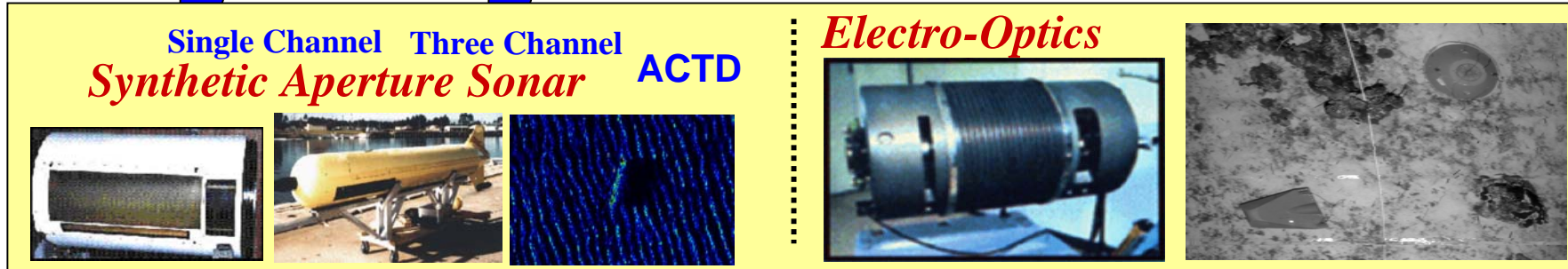
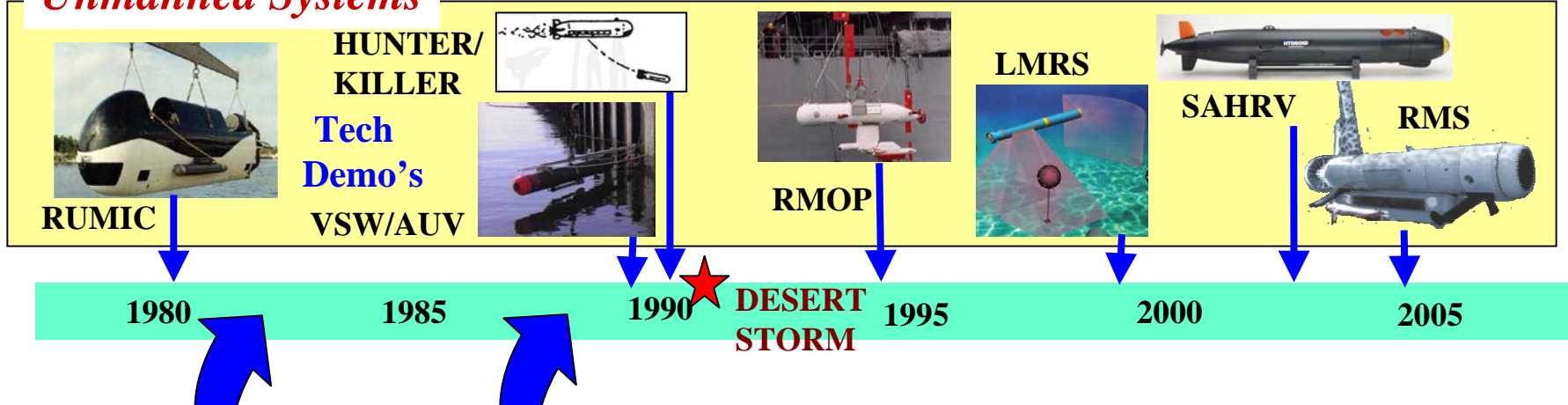
There are no silver bullets that provide a universal solution

The Importance of A Strong Tech Base Program

- The Opportunities Were Clear But Unfunded
- All Technologies Do Not Advance at the Same Pace
- A Weakly Funded Tech Base Impeded the Organic Programs



Unmanned Systems



Augustine's Law XXVII:
Rank does not intimidate hardware. Neither does the lack of rank.

Barriers To Success

- **Failure to Commit to a Platform**
- **Demean the Current Programs to Sell New (Potential) Capabilities**
- **Ignore the MCM Community Technical Experts**
- **Constantly Second-Guess Key Decisions**

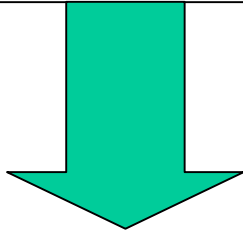
Law XXVI: If a sufficient number of management layers are superimposed on top of each other, it can be assured that disaster is not left to chance

- **Needlessly Change or Over-Specify Requirements**

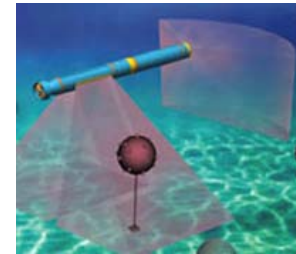
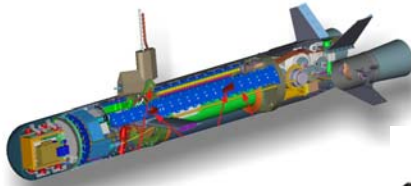
Law XV: The last 10 percent of performance generates one-third of the cost and two-thirds of the problems

What's behind the current MCM Success Story?

- A Clear and Sustained Vision
- Congressional Support: The MIW Certification Process
- Committed Senior Leadership: SECDEF and CNO



Technical Solutions + LCS Pull = MCM Capability



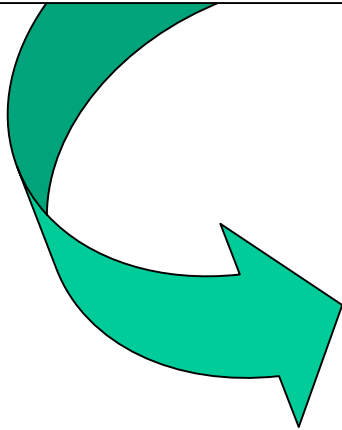
The Platform is Essential

Without emergence of LCS, Organic MCM would have failed to materialize

And Then.....

There is Skinner's Law

“Systems always work best and cost least during the conceptual stage. Performance and cost are all downhill from there!”



We should make sure that we maintain our dedicated MCM Forces until LCS and the concept of organic systems is fully demonstrated And accepted by the Fleet

If anyone knows who first said this let me know!

What I Think I Learned – The Big Four

- 1. Commitment to A Platform is Essential**
- 2. Stay the Course**
 - Form a tight Leadership Team**
 - Listen to the MIW Technical Experts**
- 3. Maintain the Tech Base**
- 4. Execute**