

AIRBORNE MINE COUNTERMEASURES (AMCM) PROGRAM OVERVIEW



Presented to

**NATIONAL DEFENSE
INDUSTRIAL ASSOCIATION**

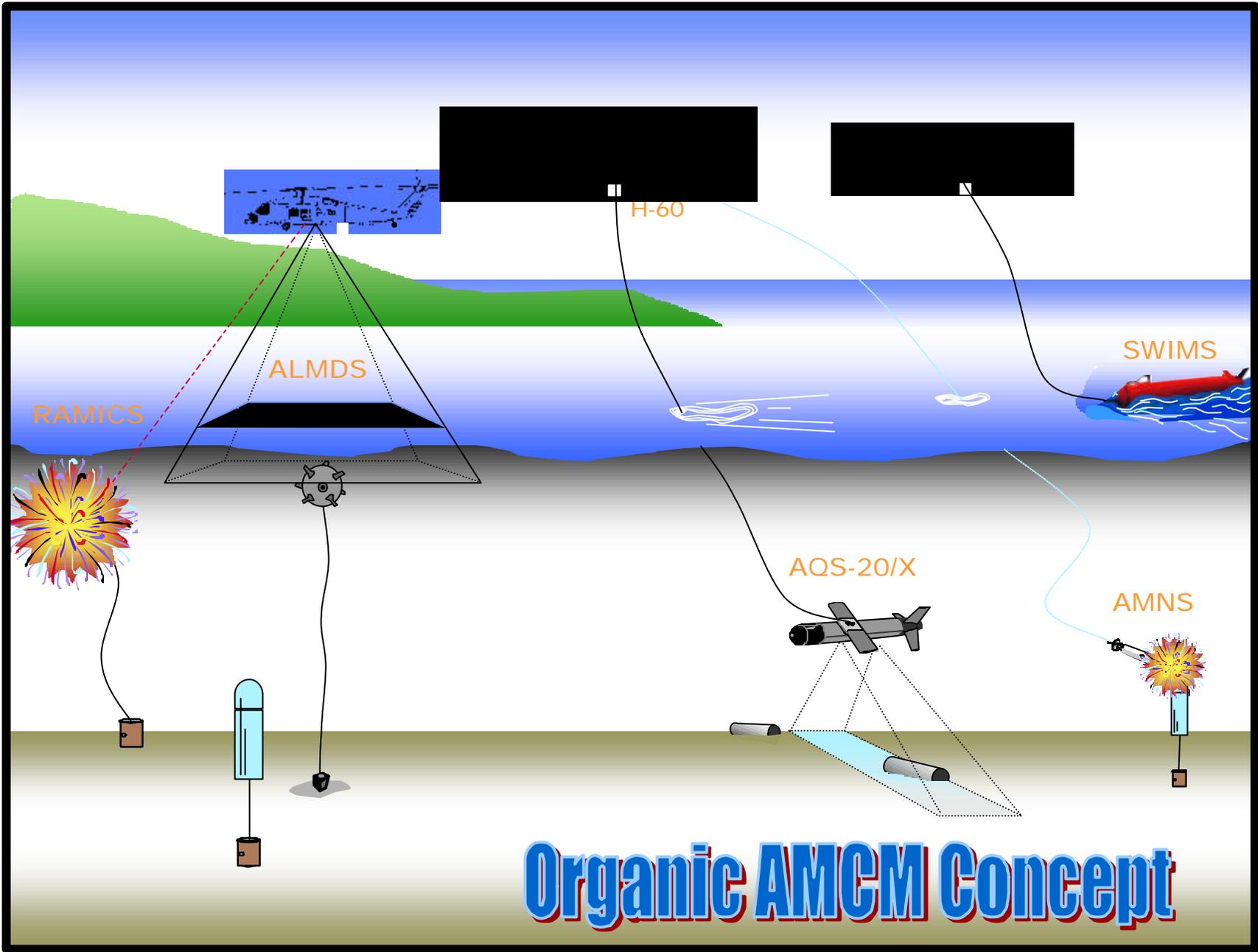
BY

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PROGRAM MANAGER, PMS210**



ORGANIC AIRBORNE MINE COUNTERMEASURES

*ORGANIC MINE COUNTERMEASURES
INVOLVE THOSE MIW-CAPABLE
FORCES, SYSTEMS, AND
CAPABILITIES THAT ARE ATTACHED
TO AND DEPLOYED WITH FORCES
SUCH AS CARRIER BATTLE GROUPS /
AMPHIBIOUS READY GROUPS
(CVBG/ARG) OPERATING
INDEPENDENTLY OR AS A COMBINED
TASK FORCE*



AMCM LETTERS/MEMOS

<u>AUTHOR</u>	<u>SUBJECT</u>	<u>DATE</u>	<u>DESCRIPTION</u>
DIRECTOR, N85 & DIRECTOR, N88	JOINT N85 AND N88 OPERATIONAL ASSESSMENT STUDY OF AN AIRBORNE MINE COUNTERMEASURES (AMCM) TRANSITION FROM THE MH-53E TO THE H-60 HELICOPTER	16 APR 97	ANNOUNCES A JOINT N85 AND N88 EFFORT TO INVESTIGATE AND STUDY THE FEASIBILITY OF TRANSITIONING FROM THE MH-53E MINESWEEPING HELICOPTER TO A H-60 TYPE MODEL SERIES (TMS) HELICOPTER.
PRINCIPAL DEPUTY, ASN	OAMCM	16 APR 99	STATES RESPONSIBILITIES OF PEO(A) AND PEO(MIW) FOR THE OVERALL OAMCM PROGRAM.
UNDER SECRETARY OF DEFENSE	CH-60 NAVY UTILITY HELICOPTER ACQUISITION DECISION MEMORANDUM	08 JUL 98	THE NAVY SHALL REPORT THE RESULTS OF THE SH-60 AMCM TOW CAPABILITY DEMONSTRATION TO THE OVERARCHING IPT (OIPT), INCLUDING AN ASSESSMENT OF ANY MODIFICATIONS NEEDED TO THE BASELINE AIRCRAFT TO ACCOMMODATE THE AMCM EQUIPMENT WITH AN ESTIMATE ON COST AND SCHEDULE IMPACT AND AN ESTIMATE OF ANY INCREASE TO AIRCRAFT QUANTITIES NEEDED FOR THE AMCM MISSION.
SECRETARY OF DEFENSE	DON MINE COUNTERMEASURES (MCM) FUNDING	08 JAN 99	STATES NAVAL MINE WARFARE PROGRAMS SHOULD BE FENCED FROM FURTHER FUNDING REDUCTIONS UNTIL THE ORGANIC CAPABILITES WE REQUIRE HAVE BEEN ACHIEVED.
PEO(A) AND PEO(MIW)	INTEGRATION OF ORGANIC AIRBORNE MINE COUNTERMEASURES (AMCM) ABOARD CH-60S	FEB 99	FACILITATES THE CONTINUED DEVELOPMENT OF AN INTEGRATED ORGANIC AMCM CAPABILITY AND ITS DELIVERY TO THE FLEET BY FY06. ALSO STATES THE RESPONSIBILITIES OF EACH PEO.
PRINCIPAL DEPUTY, ASN	ACQUISITION CATEGORY (ACAT) DESIGNATION REQUEST FOR THE ORGANIC AMCM (OAMCM) PROGRAM	JUL 99	DESIGNATES EACH OF THE 5 AMCM PROGRAMS ACAT II PROGRAMS.

OAMCM CHARTERS AND MOUs

Shall serve as the governing documents ensuring continuity of the overarching organic acquisition strategy between respective program offices

- **OAMCM MOU between PEO(MIW) and PEO(A)**
- **OAMCM IPT Charter**
 - Under review within PMS210
- **RMS MOU between PMS210 and PMS407**

PMS210 OAMCM IPT PARTICIPANTS

PMA-299

NAVAIR

Field Activities

NAWC/AD - RWATS

NSWC /Dahlgren - CSS Panama City

JHU/APL

Support Contractors

Analysis and Technology, Inc.

DP Associates

General Scientific Corp.

METRON

MITRE

Prime Developers

Lockheed Martin, Owego

Lockheed Martin, Syracuse

Sikorsky Aircraft Corporation

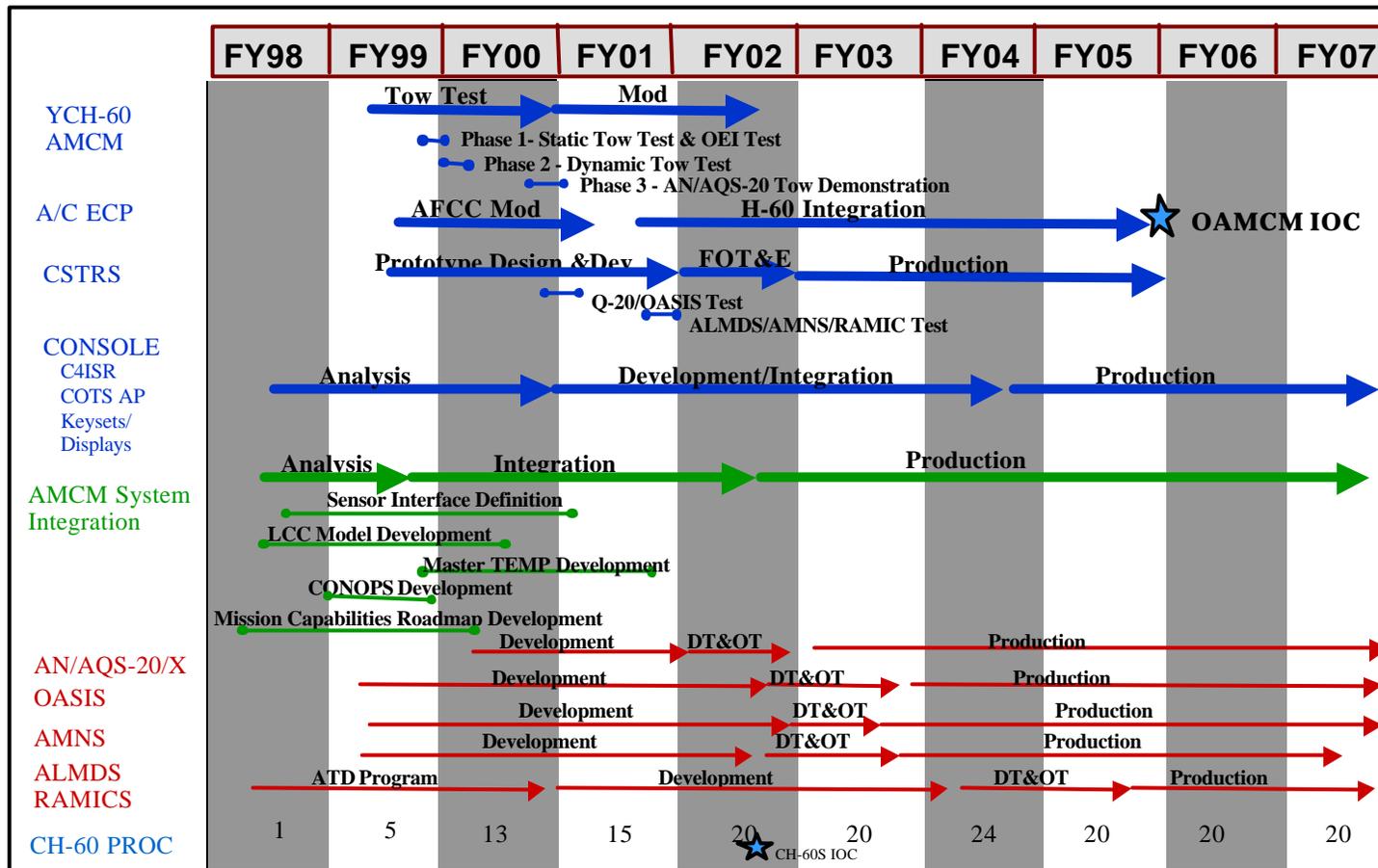
Concurrent Technologies Corporation

CH-60S HELICOPTER



OAMCM

Schedule



YCH-60 Tow Tests

STRAIN TESTS

Aug 99

Maximum Values Reached:

- 11.5k lbs/41° Down/25° Skew
- 11.5k lbs/16° Down/20° Skew
- 11.5k lbs/30° Down/0° Skew

PHASE 1

Nov 99

Static Tow Test

Nov - Dec 99

OEI Test

PHASE 2

Dec 99

Triple Mop (6k lbs)

PHASE 3

Sept 00

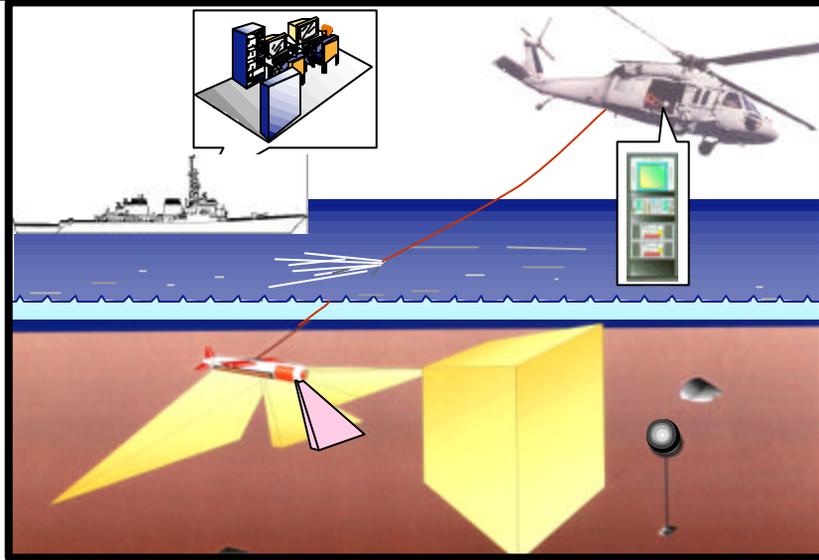
AN/AQS-20 Tow Demo

YCH-60 Tow Tests (Cont'd)

GOALS FOR INITIAL STATIC & DYNAMIC TOW TEST (PHASES 1 & 2)

- Qualify Air Frame/Tow Point Structure
- Evaluate Dynamic Component Loads
 - Effect of Stabilator Position (Dynamic Only)
- Limited HV Work
 - Clean Configuration
 - Effect of Stabilator Position (Dynamic Only)
- Flying Qualities
 - Control Remaining
 - Aircraft Attitudes
 - Pilot Contact/Fatigue
 - Effect of Stabilator Position

AN/AQS-20/X SONAR, MINE DETECTING SET



Program Information

Platform: CH-60S

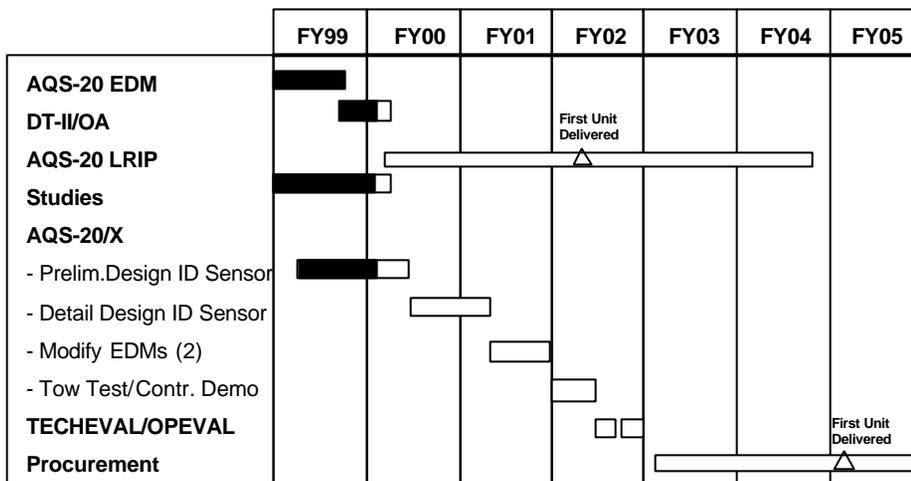
Category: ACAT II

Program Description:

- High speed minehunting from organic CH-60S
 - AQS-20/X EMD phase started 4Qtr FY99
 - AQS-20/X EMD objective is integration of existing EOID sensor into existing AQS-20 system
 - LRIP of AQS-20 concurrent with AQS-20/X EMD

Program Accomplishments

- CBD announcement of intent to sole source AQS-20/X EMD phase, 22 April 99
- AQS-20/X EMD phase J&A approved, May 99
- ACAT II designation, 29 July 99
- Contractor Tow Test and Contractor Demonstration completed, Aug 99



AIRBORNE MINE NEUTRALIZATION SYSTEM (AMNS)



Program Information

Platform: MH-53E & CH-60S

Category: ACAT II

Program Description:

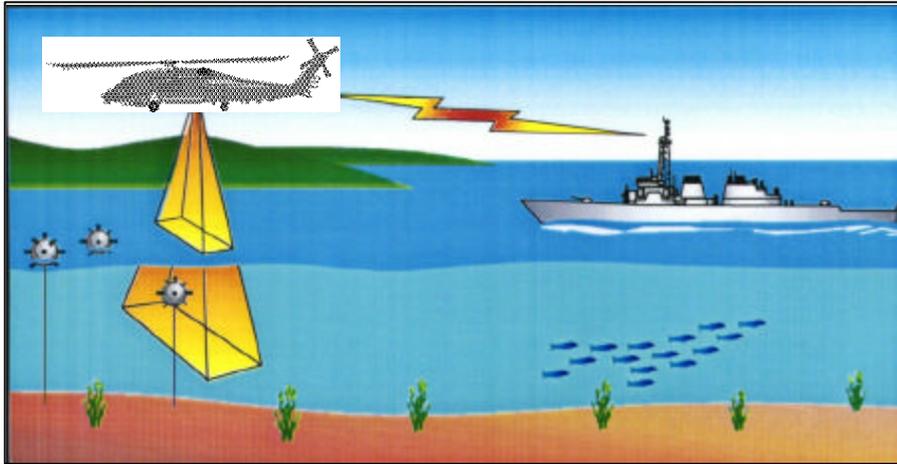
- Expendable mine neutralization vehicle deployed from CH-60/MH-53 to reacquire and neutralize moored or proud bottom mines
- System substantially reduces neutralization time per mine

EVENT	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Design/Fab	█							
Integrate to H-53		□						
TECHEVAL		□						
OPEVAL			□					
Interim Cap Kawd			△					
CH-60S Integ K			▬					
FOT&E				□				
Milestone III					△			
Production Kawd					▬			

Program Accomplishments

- Section 845 Agreement signed Dec 98 with Lockheed Martin/STN Atlas to develop prototype for testing from MH-53E platform
- MH-53E AMNS Weapon Systems Explosive Safety Review Board (WSESRB) meeting, Apr 99
- MH-53E Baseline Design Review, May 99
- Change order for shape charge explosive from RDX Wax to PBX N9 insensitive munition, Aug 99

AIRBORNE LASER MINE DETECTION SYSTEM (ALMDS)



Program Information

Platform: CH-60S

Category: ACAT II

Program Description:

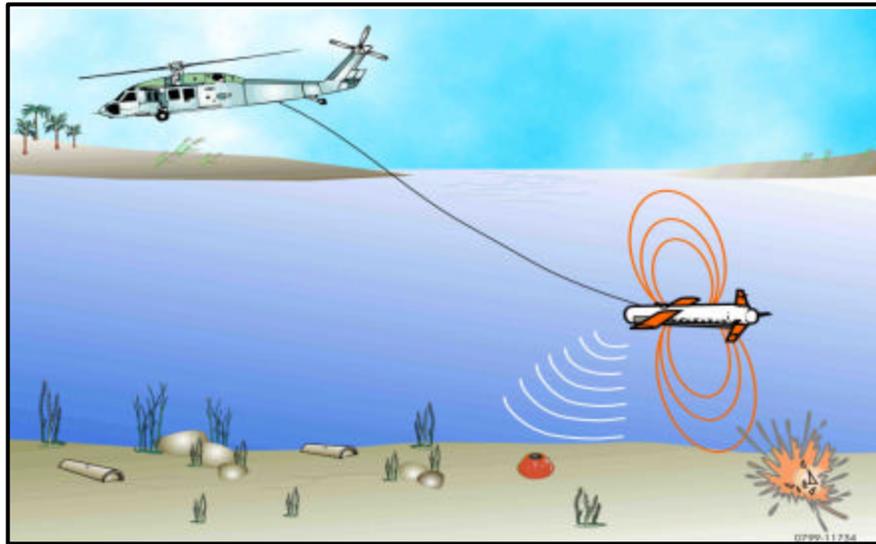
- Airborne system using LIDAR technology to detect, localize, and classify near-surface moored and floating sea mines
- Organic self-protection, mine avoidance, precursory reconnaissance in combat escort role
- Entering E&MD phase

	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
RFP/Proposed EVAL	■							
Milestone II		◇						
EDM Contract Award		△						
Design Reviews		PDR △	CDR △					
Fabrication				▬				
Contractor Test					□			
System Delivery					▲			
DT-IIA / DT-IIB (TECHEVAL)					▬			
Initial OP Look - DTA					▬			
PCA					△			
OPEVAL						▬		
Milestone III						◇		
Production							▬	

Program Accomplishments

- FY 97/98 Competitive Evaluation Field Test conducted to reduce technical risk to E&MD program
- Requirements document approved
- Acquisition Strategy approved
- RFP released 1 July 1999
- Source Selection ongoing

ORGANIC AIRBORNE AND SURFACE INFLUENCE SWEEP (OASIS)



Program Information

Platform: CH-60S

Category: ACAT II

Program Description:

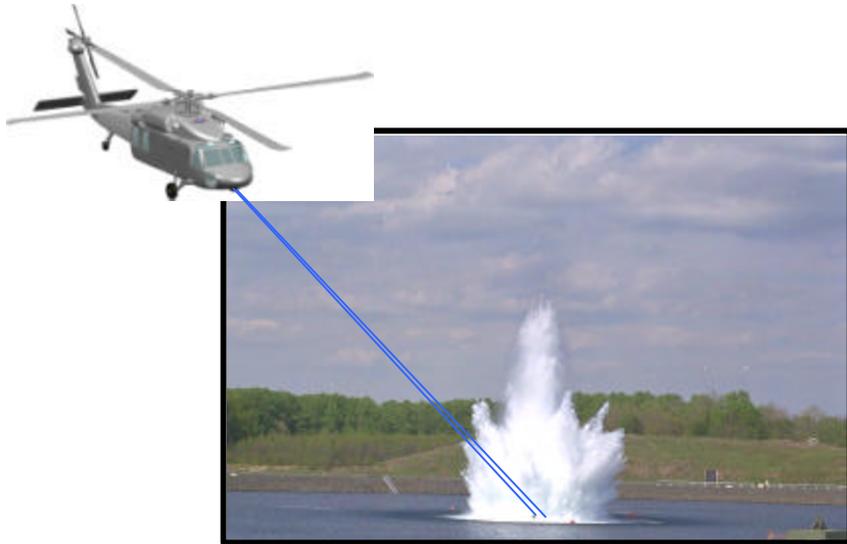
- OASIS provides an organic, high-speed, magnetic/acoustic influence minesweeping capability to be employed by the CH-60S or surface craft in support of the CVBG/ARG
- The design will interface with the common console and CH-60S pallet system

PHASE	FISCAL YEAR							
	99	00	01	02	03	04	05	06
Analysis of Alternatives	■							
RFP/Proposal Eval		▭						
Milestone II		◇						
Design/Fab/Integrate			▭					
Contractor Demo					▭			
Delivery					◇			
T&E					▭			
Milestone III					◇			
Production						▭		

Program Accomplishments

- Analysis of Alternatives (AoA) Kick-Off, May 99
- AoA Plan briefing and approval, Jun 99
- Designated ACAT II Program, Jul 99

RAPID AIRBORNE MINE CLEARANCE SYSTEM (RAMICS)



Program Information

Platform: CH-60S

Category: ACAT II

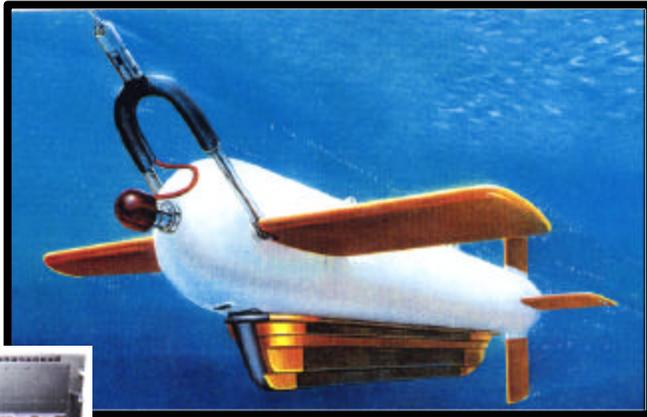
Program Description:

- Rapid and safe method for clearance of near surface and hull depth mines in advance of CVG and ARG movement
- Advanced Technology Demonstration (ATD) demonstrating feasibility of mine neutralization from Super-Cobra platform
- MS II for RAMICS CH-60S EMD 2nd QTR FY01

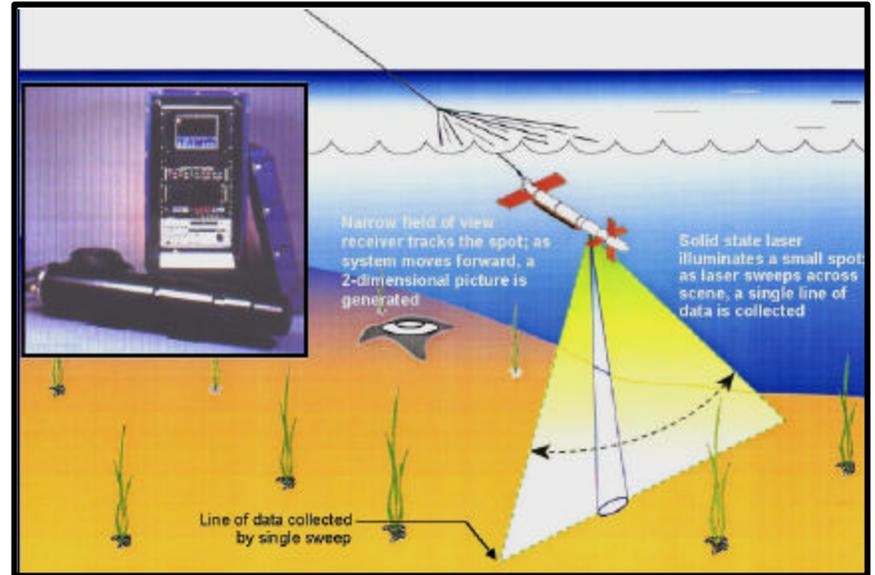
	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
ATD Complete	█							
Weapon Select		█						
Projectile Dev		█						
Milestone II			△					
EMD KAWD				△				
Targtg/Munit Dev			█					
Contractor Tests						█		
Govt T&E							█	
Milestone III								◇
Production								█

Program Accomplishments

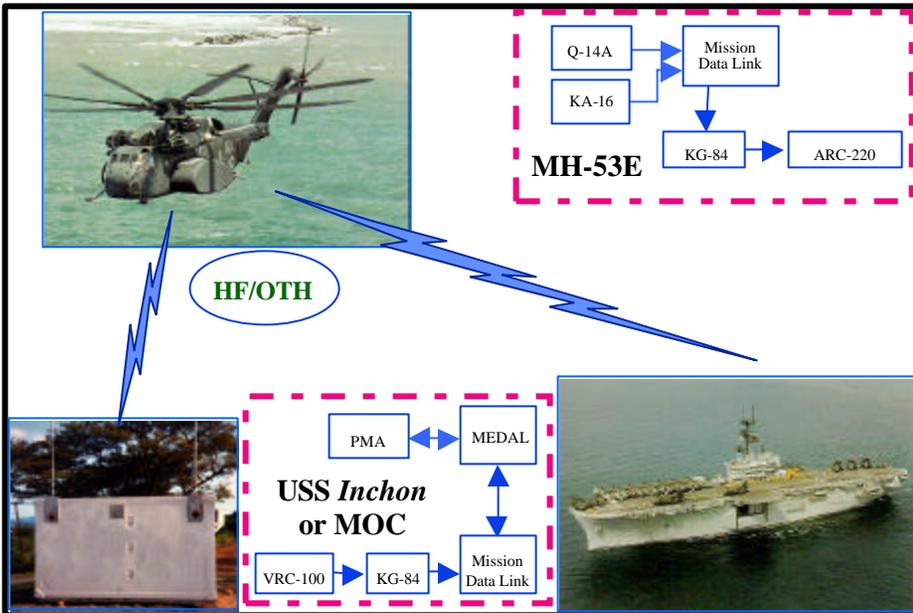
- RAMICS Program Designated ACAT II, Jul 99
- Aberdeen Safe Standoff Tests, Aug 99
- Armed Helo IPT meeting, Oct 99



**AN/AQS-14A
MINE DETECTING SET**



LASER LINE SCAN SYSTEM



AMCM C4I DATA LINK



MK-105 MOD 4 MAGNETIC MINESWEEPING GEAR