



HQMC AO Course

5 October 2004

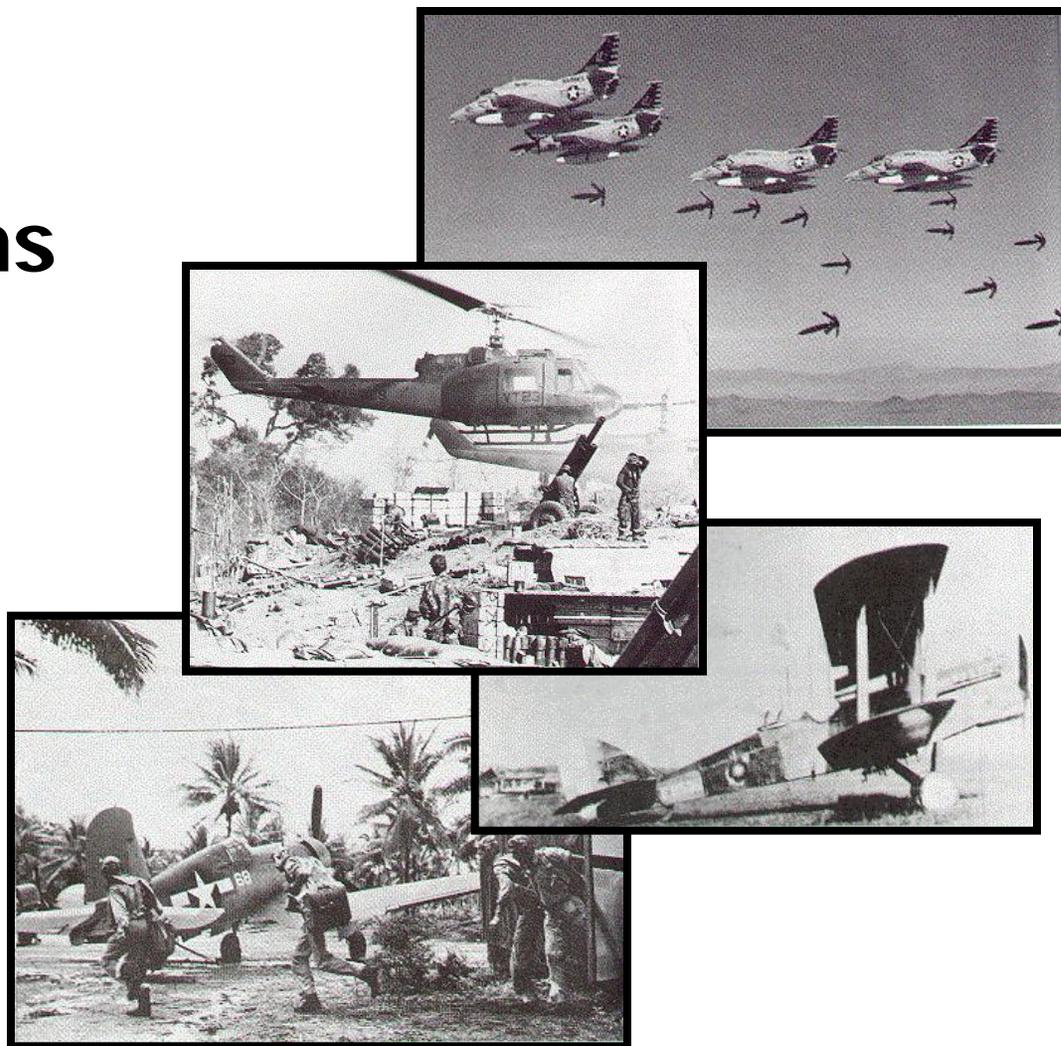


Aviation Department Brief



Overview

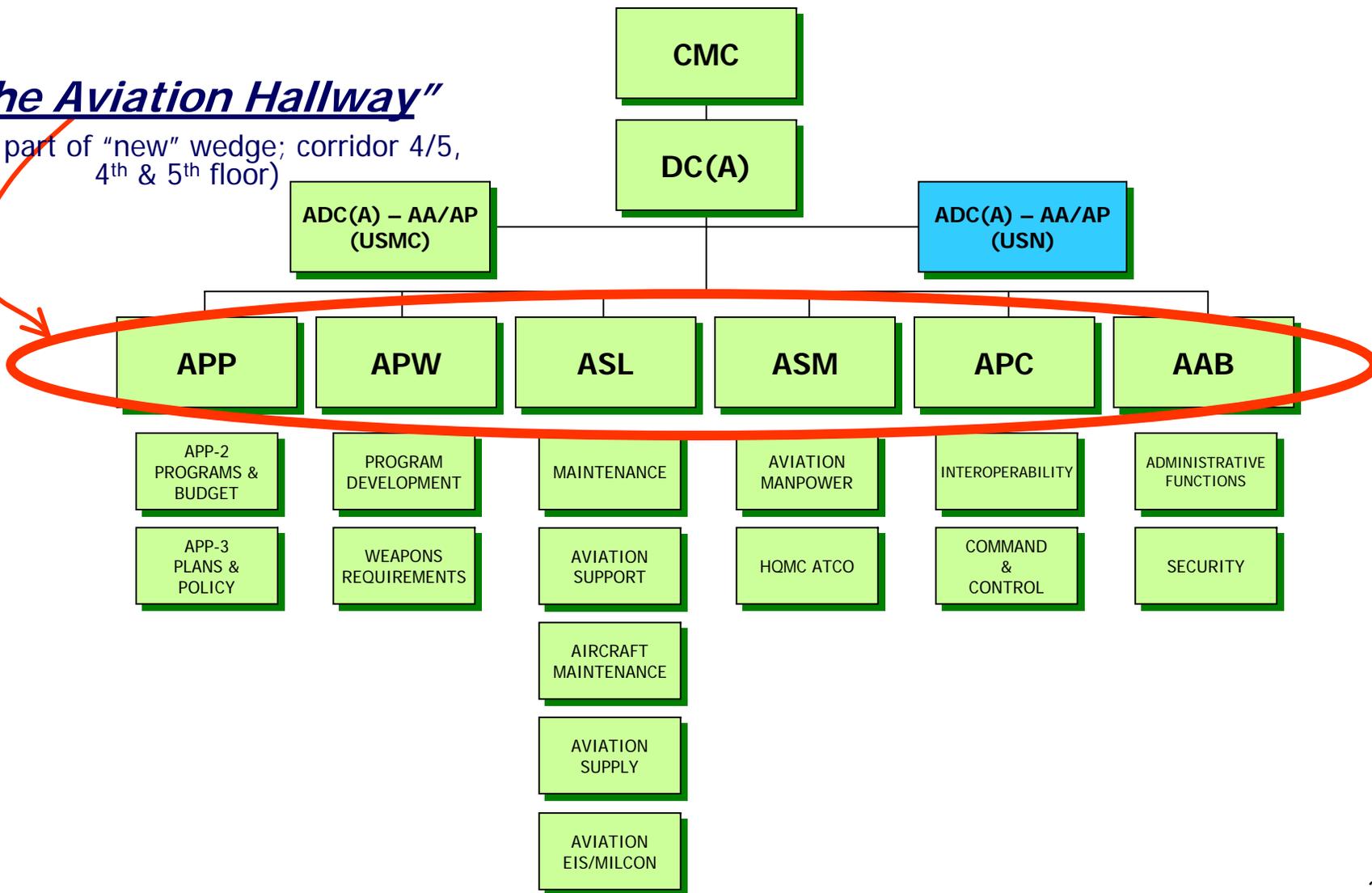
- Organization
- Branch Functions
- Programs
- Current Issues
- AO Resources





HEADQUARTERS MARINE CORPS AVIATION ORGANIZATIONAL CHART (1 JUN 04)

"The Aviation Hallway"
 (outer part of "new" wedge; corridor 4/5,
 4th & 5th floor)





Deputy Commandant for Aviation (DC/A)

“Assists CMC in planning and coordinating staff activities on all matters related to

- *organization,*
- *equipment,*
- *manpower,*
- *training,*
- *support*

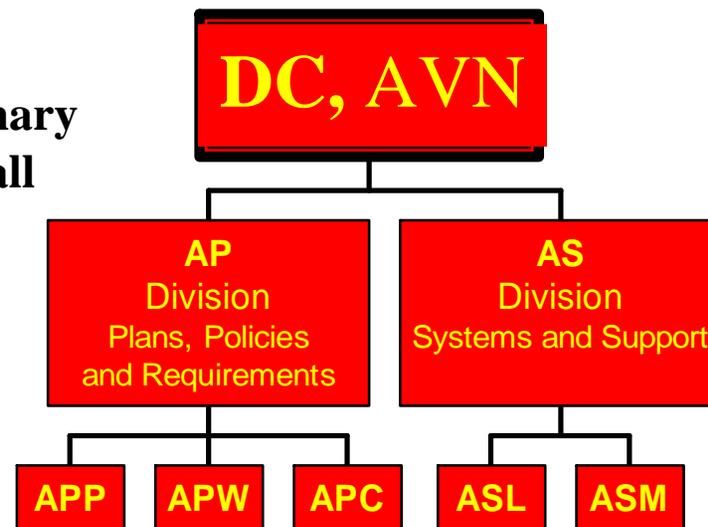
of Marine Corps aviation units and installations;

advises the CMC on systems acquisition and Joint matters related to aviation;

ensures Marine Corps aviation supports Expeditionary Maneuver Warfare *AND* is aligned with the overall Naval Aviation Program.”

Bottom Line

“DC/A runs Marine Aviation.”





Aviation Department Functions

- Formulate **policy** for Marine Aviation
- Execute the development and **acquisition of systems**
- Monitor and provide input to DoD Planning, Programming, Budgeting, and Execution (**PPBE**) processes
- Ensure aviation **operational requirements** are supported
- Determine aviation manpower requirements
- Incorporate Reserve Mobilization requirements
- Develop and update the AVIATION PLAN (AVPLAN)
- Coordinate Aviation Logistics (with Navy counterpart organizations)
- Review and recommend action on all JCS documents relating to aviation
- **Work with OPNAV Staff counterparts (N4/6/7/8...)**



Aviation Department Branches

APP

APW

ASM

APC

ASL



Aviation Plans, Programs, Budget, and Joint/External/Congressional Matters Branch (APP)



Aviation Weapons Systems Requirements Branch (APW)



Aviation Support Manpower Branch (ASM)



Aviation Command and Control Systems Branch (APC)



Aviation Support Logistics Branch (ASL)

Each branch has Subject Matter Experts on key issues



Plans, Policy, and Requirements (AP)

- **APP** (Plans, Programs, Budget, and Joint/External/Congressional Matters Branch)
 - Plans
 - Define CONCEPTS (SP21/MC21, EMW...the VISION)
 - Current operations (force planning)
 - Budget
 - Green \$ aviation programs advocate (e.g. air defense)
 - Blue \$ aviation: develop, prioritize, and protect Marine Aviation interests in DoN Aviation budget process
 - Flight hour program
 - Policies (e.g. TACAIR integration, JCAS)
 - Joint / External / Congressional Matters
- **APW** (Weapons Systems Requirements Branch)
 - Development, procurement, and employment of weapons systems, systems integration
 - Define REQUIREMENTS (ORDs/ICDs/CDDs, etc)
 - Initiate and coordinate approved aviation force requirements
- **APC** (Command and Control Systems Branch)
 - Command and control of aircraft and missiles
 - Aviation communications and ground-based air defense





Systems and Support Division (AS)

■ ASL (Logistics Support Branch)

- Develop and coordinate logistics doctrine, policy, procedures, management, training, personnel, and procurement
 - Aviation maintenance / readiness / supply
 - Aviation ordnance
 - Ground support / Expeditionary capabilities

■ ASM (Manpower Support Branch)

- Develop, analyze, and review manpower management programs
- Training issues
- Control staffing authorizations for all aviation units
- Administrative aviation support (e.g. air shows)





DC/A Focus of Effort

GWOT

Transition / Transformation

Legacy Platform Sustainment

Prioritization of Requirements – Balance of Resources



Programs





Transition

TODAY

TOMORROW

KC-130 F/R/T

KC-130J/T



CH-46E
CH-53D

MV-22



UH-1N
AH-1W

UH-1Y
AH-1Z



PIONEER

VUAV



CH-53E

HLR



F/A-18 A+/B/C/D
AV-8B

F-35 JSF



EA-6B

AEA

VH-3/VH-60

VXX

“Old” AVLOG

**“NEW” AVLOG
MALSP II**

“Old” MACCS
(many systems)

**“NEW” MACCS
CAC2S / ASPARCS /
SLAMRAAM / G/ATOR / HELRASR**



KC-130J

- IOC: 2Q FY05
 - 2D MAW - FY05
 - 3D MAW - FY07
 - WestPac - FY11
- OPEVAL
 - First phase completed April 2004
 - Next report Jan 05
- DT & OT in progress
- FOC: FY13
- Total Force:
 - 130T: 28
 - 130J: 51
- Night Vision
- Survivability





MV-22 Osprey

- IOC: FY07
 - 2D MAW - FY07
- Transitions begin...
 - 3D MAW - FY09
 - 1st MAW - FY13 ?
 - 4th MAW - FY15
- Testing
 - OPEVAL Jan-May 05
 - Milestone III: Aug 05
 - VMX-22 flown ~1200 hrs
- FOC: FY17
- Objective: 360





AH-1Z Cobra & UH-1Y Huey

- **OPEVAL** Spring-Summer 2005
- UH-1Y
 - 989 flight hours*
 - IOC: FY08
 - FOC: FY12
 - Reserve: FY13
 - Obj: 100
- AH-1Z
 - 1464 flight hours*
 - IOC: FY11
 - FOC: FY17
 - Reserve: FY19
 - Obj: 180
- New Build
- Turned Exhaust

*28 September 2004



<u>UH-1 Comparison</u>	<u>UH-1N</u>	<u>UH-1Y</u>	<u>Improve</u>	<u>AH-1 Comparison</u>	<u>AH-1W</u>	<u>AH-1Z</u>	<u>Improve</u>
Max Gross weight, lb.	10,500	18,500	76%	Max Gross weight, lb.	14,750	18,500	25%
Max internal fuel, lb.	1,360	2,584	90%	Max internal fuel, lb.	2,100	2,768	32%
HOGUE useful load, SL/hot, lb.	3,532	5,930	68%	HOGUE useful load, SL/hot, lb.	3,986	5,558	39%
* Util Cruise speed, 3k ft/hot, ktas	107	153	43%	* Cruise speed, 3k ft/hot, ktas	131	142	8%
* Msn rad w/4 fully ld troops, nm	63	134	113%	* Msn radius w/attack payload	58	128	121%
*Maneuverability, g's	+0.5 to +2.27	-0.5 to +2.8	*KPPs	*Maneuverability, g's	+0.5 to +2.4	-0.5 to +2.8	*KPPs



CH-53E / Heavy Lift Replacement

- AoA: “new build” most cost-effective (vs. SLEP)
- ORD approved by MROC
- CJ&A (Sole Source)
- R&M Metrics
- Cost of Ownership
- Planned IOC: 2015
- Planned FOC: 2021



Requirement (KPPs)

- 27K / 110
- Survivability
- Logistics footprint

Requirement (KPPs)

- Interoperability
- Mission Reliability = .89
- Sortie Generation Rate = 2.6



STOVL Joint Strike Fighter

- IOC: FY12
 - 2D MAW - FY12
 - 3D MAW - FY18
 - WestPac – FY20
- FOC: FY25
- Objective: 420

- Weight...
- USAF STOVL?





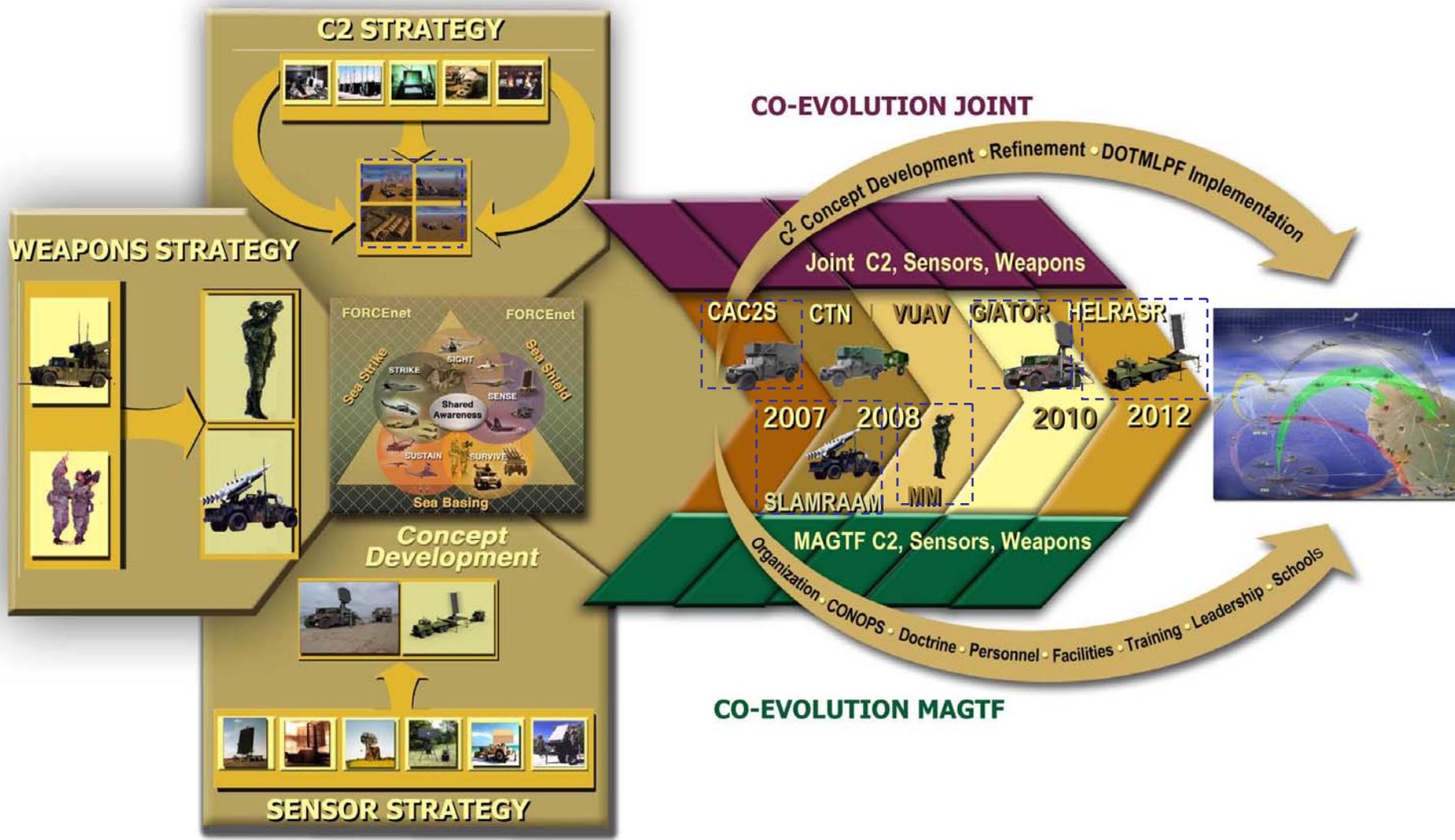
Unmanned Aerial Vehicles

- Sustain Pioneer until 2010
- Pioneers deployed ISO OIF I/II
- VTUAV requirements currently being staffed – JCIDS / CONOPS
 - 240+ NM, 200+ knots, high ceiling...
 - **200 lb payload**
 - Low Signature: IR, RCS, audible, visual
 - Transportable via V-22 / CH-53E
 - > 90% reliability
 - Links to ForceNet
 - Amphibious ship ops
 - Operated & maintained by 6-8 for 24 hrs
 - 1st VMU transition FY08 (?)
 - Fielding needed in FY09
 - Obj: 44 Aircraft, 22 Ground Control Stations
 - **Common Sensor Package**
- Partner with U.S. Coast Guard





Marine Air Command and Control System





Legacy Platform Modernization

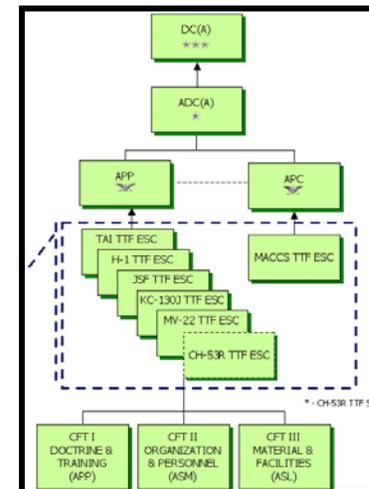
- **AV-8B**
 - OSCAR (JDAM capability)
 - Litening AT
- **F/A-18**
 - ECP-583
 - ATARS SSR (F/A-18D)
 - Litening AT
- **EA-6B**
 - ICAP III
- **KC-130 F/R/T**
 - Night Vision Lighting mods
 - Avionics Modernization Program (AMP)
- **CH-46E**
 - Engine Reliability Improvement Program (ERIP)
- **AH-1W**
 - NTS, Gun reliability upgrades
- **UH-1N**
 - Tailbooms, FLIRs
- **CH-53E**
 - Engine Reliability (GRIP), ramp weapon





Current Issues

- **GWOT**
 - ASE
 - Force planning
 - In-theater Depot capability



- Transition / Transformation **(TTFs)**
- TACAIR Integration
- Presidential Helo (VXX)
- **Safety**





Future Concepts

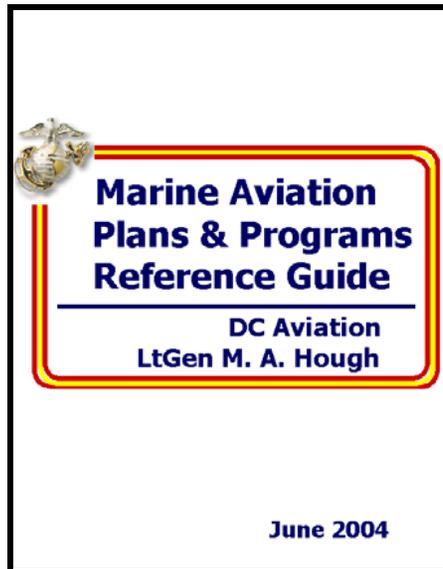
- Amphibious ships
 - LHA(R)
 - MPF(F)
- Joint Heavy Lift
 - QTR?
- V-22 Escort
- Logistics
 - MULES?





Resources for Action Officers

- AVPLAN (web site)
- “Brain Book”



- Official tasks: EA = Col Darrah (614-1010)
- APP-24... (Joker: 693-8389 / BoorsteinMA@hqmc.usmc.mil)



Final Thoughts

- If your issue involves something that comes on or off an aircraft...coordinate with AVN!

People – Ordnance – Electrons – Support – Ideas – ANYTHING

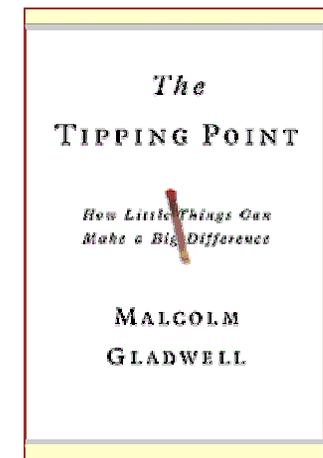
- Why Marines win in The Building & on The Hill

- Coordinated & prompt staff action: CONSISTENT, DEFENDABLE POSITION

CONTACTS – PERSONALITY – REPUTATION – RESPONSIVENESS

- Learn how The Building works
- Beating your opponents

- PPBE course
- Capitol Hill Workshop



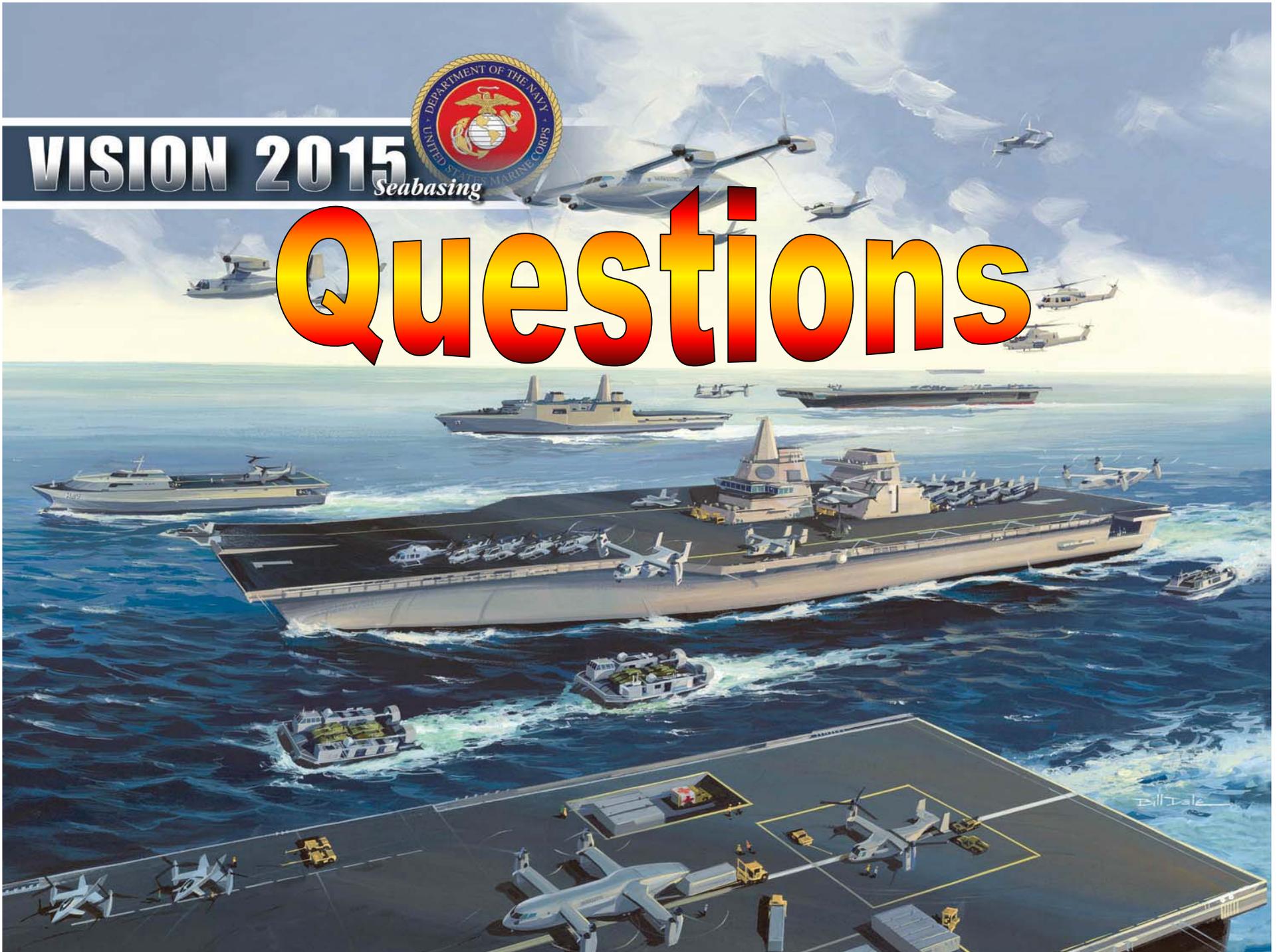
- Do you want to make a difference at HQMC?

VISION 2015

Seabasing



Questions





Litening ISR Pod (Video Downlink)

Litening ISR





Tomorrow – From the Sea

A future scenario...





MARINE AVIATION TRANSITION TASK FORCE (TTF) ORGANIZATIONAL CHART

TTF MISSION STATEMENT
 TTF'S WILL DEVELOP TRANSITION PLANS THAT WILL IMPLEMENT CHANGES TO THE DOTMLPF AREAS (AS REQUIRED) ASSOCIATED WITH THE FIELDING OF THE NEXT GENERATION OF AIRCRAFT/SYSTEMS FOR THE MAGTF.

Each TTF has key stakeholder representation

