



Navy Aerospace/Operational Physiology Program (NAOPP)

LCDR Patrick Dougherty, PhD

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- 2001, BS, Exercise Science, Ithaca College
- 2002, MS, Kinesiology, TAMU
- 2003-2005, PhD Student, TAMU
- 2009, PhD, TAMU HSC COM

- JUN-JUL09, Officer Development School
- JUL09-APR10, Student NAOP
- APR10-FEB12, Aviation Survival Training Center, Asst Director
- APR12-MAY15, Training Air Wing 4, AMSO
- JUN15-JUN17, Marine Aircraft Group 12, AMSO
- JUL17-NOV17, USUHS, Asst Professor
- NOV17-present, Pentagon, Physiological Episode Action Team (PEAT)

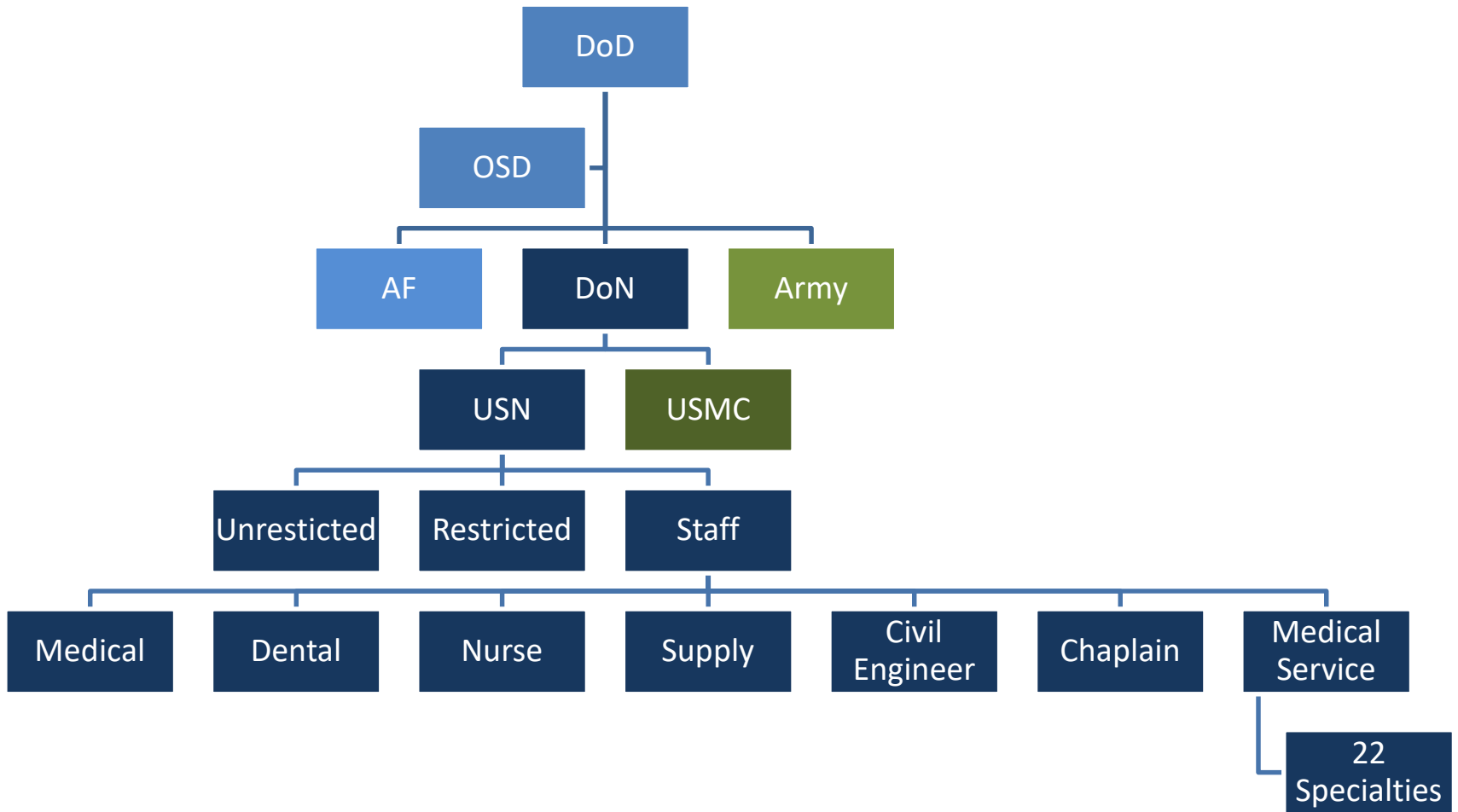


Overview

- Navy overview
- MSC/NAOPP Prerequisites
- NAOPP Mission
- My experience
- Summary
- Q & A



Department of Defense (DoD)





General MSC Prerequisites

- US citizen
- Age & Physical standards
 - <42 years old, height/weight & PT standards
- Serve on Active Duty for minimum of 3 yrs
- Education
 - Depends on the specialty program



Medical Service Corps Specialties

- Health Care Administrators
- Clinical Care Providers
 - Audiology
 - Clinical Psychology
 - Dietetics/Food Management
 - Occupational Therapy
 - Optometry
 - Pharmacy
 - Physical Therapy
 - Physician Assistant
 - Podiatry
 - Social Work
- Health Care Scientists
 - Aerospace Experimental Psychology
 - **Aerospace/Operational Physiology**
 - Biochemistry
 - Entomology
 - Environmental Health
 - Industrial Hygiene
 - Medical Technology
 - Microbiology
 - **Research Physiology**
 - Radiation Health
 - Research Psychology



NAOPP Prerequisites

- Age & Physical standards
 - <42 years old, PT standards, pass a flight physical
- Education
 - MS or PhD in Physiology or related field
 - Required courses
 - OChem, Biochem, Physics, Statistics, College math, Bio/Physiology
 - Recommended courses
 - Biochem, Biomechanics, Anatomy, Histology, Microbiology, Calculus
 - GPA ≥ 3.0 for all degrees.
- Experience as an instructor/teach is desirable.

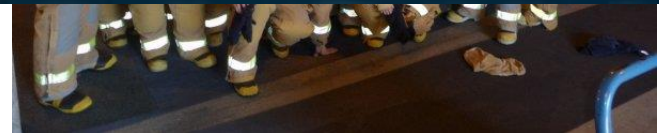


NAOP Selection Process

- Pensacola Screening Process
 - Present a 15-20 minute brief to a local board of NAOPs.
 - 1v1 interviews with 2 different NAOPs.
- Evaluation based on content, style, delivery, Q&A.



Officer Development School





NAOOPP Mission

- Support the Navy's war fighters through education, training, aeromedical and human performance support, acquisitions, and research, development, test and evaluation (RDT&E).



Student NAOP training



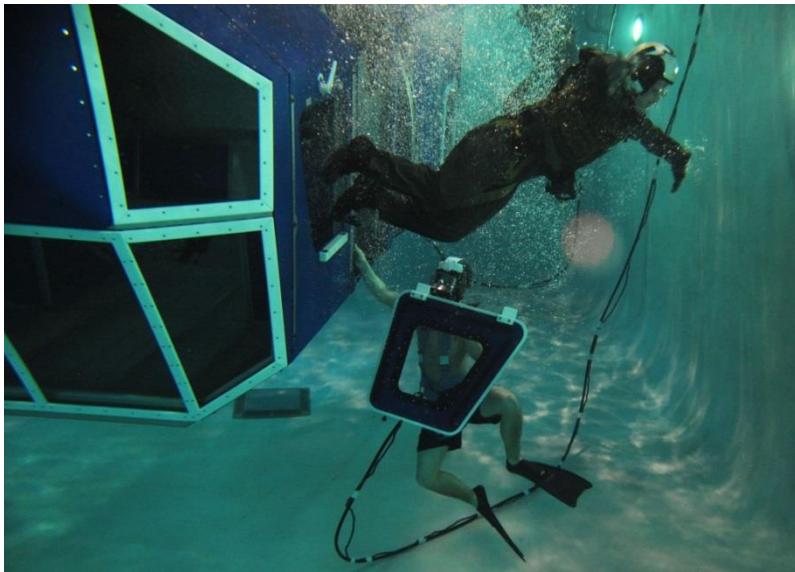
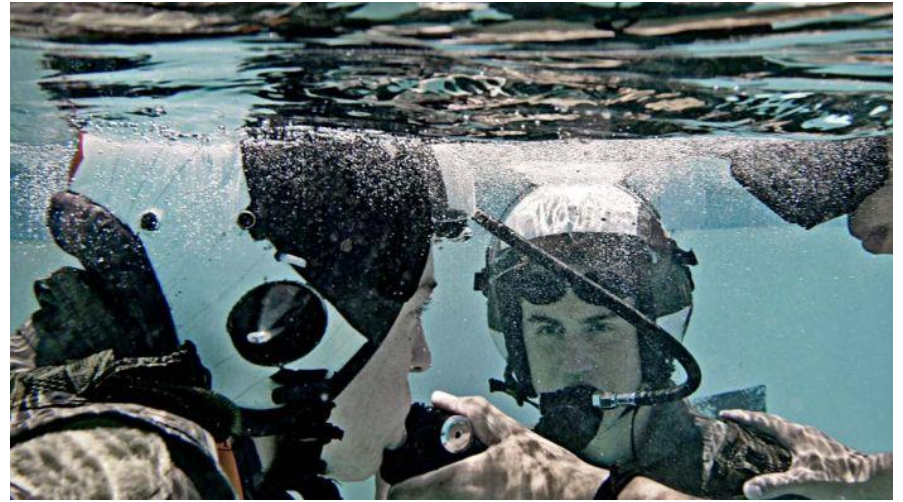


Internship

- 1-3 years at an Aviation Survival Training Center (ASTC).
- Conduct initial and refresher physiology and water survival training.
 - Spatial Disorientation, Human Performance, Hypoxia, G-LOC
- Leadership role.



Water survival training





Human Centrifuge Training



Wed Mar 18 11:05:06 2009

Student: 1 LI Dufkewichin

Inst: HMG Mainz

GZ: 1.41

Gy: -0.01

GK: -0.05

G-Sult: 0.15





Aeromedical Safety Officer (AMSO)

- 2-3 years duration
- NAOPs typically perform 2-3 AMSO tours.
- Specific responsibilities depend on where you are stationed.
- Aviation Safety Officer*



Training Air Wing FOUR (TW-4)



C-12 Huron



T-44 Ute
Corpus Christi NAS 2001
@LETAJEM



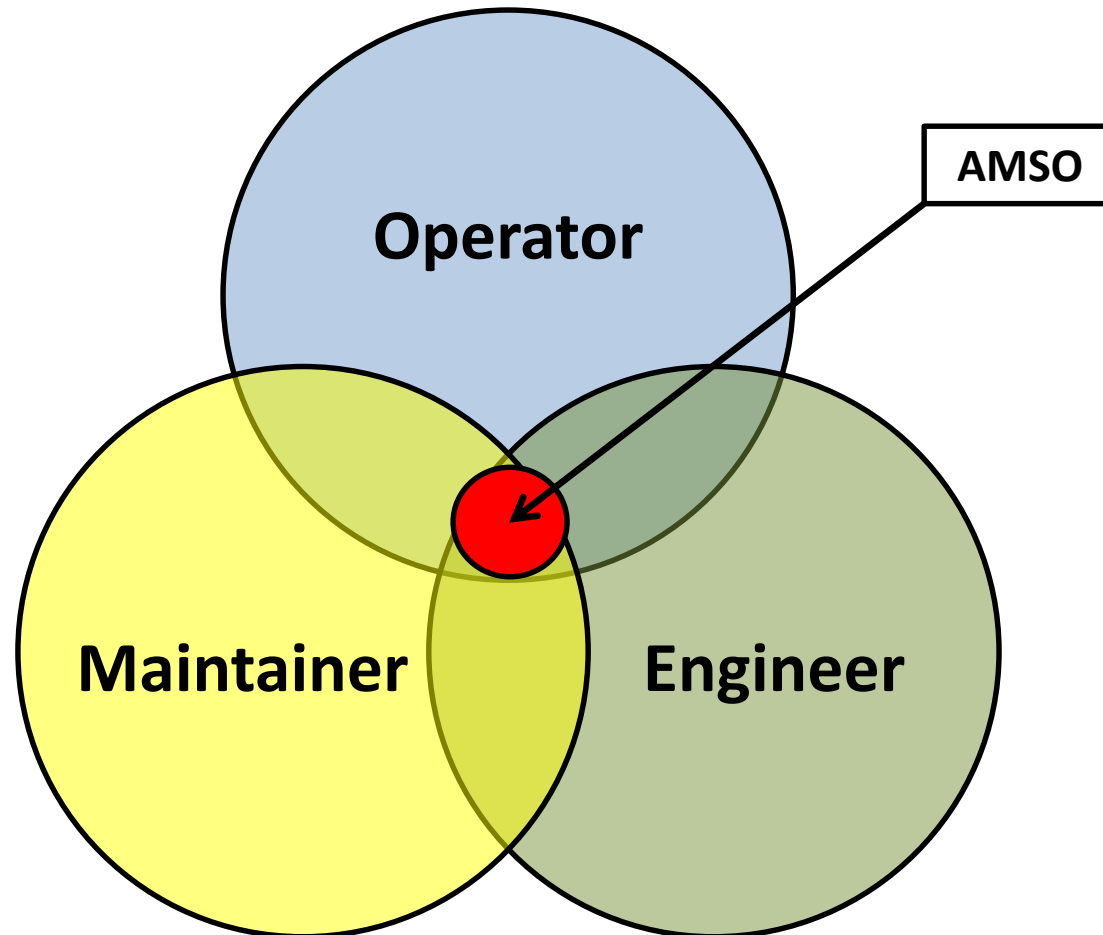


TW-4 AMSO

- New billet for NAOP community
- Annual physiology training
- Egress/ejection seat training
- Flight gear issues
- Airsickness Management Program



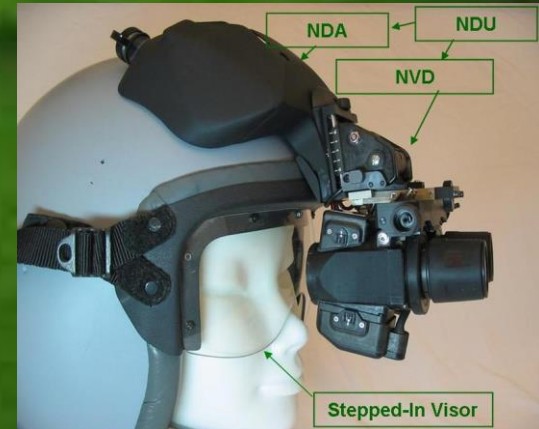
Flight Gear Liaison



Human System Integration

MAG-12 AMSO

- Night Systems
- Laser Safety Officer
- ROBD
- Survival equipment
 - Radios, CBRN



IR
Laser

Green
Laser



Flight time

400 flight hours

9 different aircraft:

F/A-18, P-3, T-34C,
TH-57, T-6B, T-44, C-
12, C-130, C-5





Assistant Professor, USUHS





Physiological Episode Action Team (PEAT)



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From Chief of Naval Operations Public Affairs

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Volume I

F/A-18 and E/A-18 Fleet Physiological Episodes

NAVAL OFFICERS



What our parents think we do



What our friends think we do



What the Chiefs think we do



What the public thinks we do



What we think we do



What we really do



Summary

- Officer > MSC > NAOP
- Role is to support the operator
- MS or PhD prerequisite...

- Numerous opportunities across the services
 - Navy, Air Force, Army



Questions?

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