**NAVY MEDICINE**

**MISSION**

Navy Medicine delivers expeditionary medical care to the Fleet, Marine Corps, and Joint Force when and where the fight demands while always taking care of Sailors and Marines wherever they serve.

**ONE NAVY MEDICINE**

**ACTIVE DUTY + RESERVE + CIVILIAN**

**SUPPORTING 2 SERVICES**

**UNITED STATES NAVY**

<table>
<thead>
<tr>
<th>Role</th>
<th>Active Duty (AC)</th>
<th>Reserve (RC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Corpsmen</td>
<td>19,080</td>
<td>2,200</td>
</tr>
<tr>
<td>Medical Corps Officers</td>
<td>3,100</td>
<td>340</td>
</tr>
<tr>
<td>Nurse Corps Officers</td>
<td>2,440</td>
<td>935</td>
</tr>
<tr>
<td>Dental Corps Officers</td>
<td>870</td>
<td>130</td>
</tr>
<tr>
<td>Medical Service Corps Officers</td>
<td>2,375</td>
<td>175</td>
</tr>
</tbody>
</table>

**UNITED STATES MARINE CORPS**

<table>
<thead>
<tr>
<th>Role</th>
<th>Active Duty (AC)</th>
<th>Reserve (RC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Corpsmen</td>
<td>5,320</td>
<td>825</td>
</tr>
<tr>
<td>Medical Corps Officers</td>
<td>430</td>
<td>115</td>
</tr>
<tr>
<td>Nurse Corps Officers</td>
<td>160</td>
<td>40</td>
</tr>
<tr>
<td>Dental Corps Officers</td>
<td>230</td>
<td>70</td>
</tr>
<tr>
<td>Medical Service Corps Officers</td>
<td>330</td>
<td>65</td>
</tr>
</tbody>
</table>

*Total Force Estimates*

**BUOYED BY 2,700+ CIVILIANS**

**OPERATING ABOVE, ON, AND BELOW THE SURFACE**

**NAVY MEDICINE OPERATIONAL TRAINING COMMAND (NMOTC)**

- NMOTC is an echelon 4 shore activity under the Naval Medicine Forces Support Command (NMFSC). It provides:
  - Education and training programs for 7 different communities: Undersea Medicine, Surface Medicine, Aerospace Medicine, Line Aviation, Expeditionary Medicine, Special Operations Medicine, and Healthcare Support.
  - Administrative, professional, technical, and consultative services worldwide in operationally related Fleet and Fleet Marine Force medical training.
- NMOTC manages, coordinates, and provides selected operational programs (e.g., aviation physicals and aviation survival training).

**NMOTC is comprised of:**

- 6 detachments
- 18 training centers/activities, staffed and trained across eight civilian institutions
- 13 Navy/Marine Corps bases nationwide.

**Each year, NMOTC conducts:**

- 63 instruction program courses
- 42 operational medicine courses
- 21 survival training courses

**NMOTC produces:**

- 9 Navy Enlisted Classifications (NECs)
- 6 Navy Officer Billet Classifications
- 3 Additional Qualification Designations (AQDs)

**Hospital Corps Trauma Training (HMTT):**

- NMOTC continues to provide command and control for the HMTT programs in Cleveland, Ohio; Raleigh, North Carolina; Great Lakes, Illinois; and Jacksonville, Florida.
- The mission of the HMTT Program is to ensure first-term Hospital Corpsmen with operational orders receive trauma experience prior to reporting to their first operational assignment.
- 4 HMTT training sites graduated 190+ students in CY22.
Lt. Anca Selariu, a microbiologist with Naval Medical Research Unit (NAMRU)-2, along with three other volunteers, began a simulated Mars mission on June 25 at NASA’s Johnson Space Center.

The mission, part of NASA’s Crew Health and Performance Exploration Analog (CHAPEA) Mars surface simulation program, will last 378 days.

Selariu, a native of Romania, brings expertise in vaccines, prion transmission, gene therapy and infectious disease research to the CHAPEA mission. Her fellow volunteers include experts in engineering and medicine. Alongside her fellow volunteers, Selariu will conduct research to inform future expeditions to the surface of Mars.

The team will work in conditions closely replicating conditions on Mars and the facility and communication limitations the location would entail.

In 1959, the National Aeronautical Space Administration (NASA) embarked on an ambitious program to prepare seven military pilots for the first man-in-space program (Project Mercury). Over the next several years, NASA sent its “Mercury Seven” through a gauntlet of classes, training and tests across the United States to ensure they had the “Right Stuff” for orbital flight.

The Navy Medical Department collaborated with NASA from the very beginning of Project Mercury. Navy medical physicians and scientists served as NASA advisors and medical monitors; and Navy medical research institutions in Bethesda, Md., New London, Conn., Pensacola, Fla. and Warminster, Penn., helped ensure the success of Project Mercury.

In the 1950s and 1960s, under the leadership of Capt. Ashton Graybiel, MC, USN (1902-1995), the Naval School of Aviation Medicine’s research component (now part of the Naval Medical Research Unit-Dayton) explored the effects of fatigue, vestibular physiology, neurological science, cosmic radiation and cardiovascular fitness, all of which would prove invaluable for the first manned space flights.

The Naval School of Aviation Medicine operated special laboratories for researching spectroscopy, nuclear admission, low-level alpha radiation, medical electronics, ballisto-cardiography and bioacoustics/psychoacoustics.

Maintaining an optimal body temperature in space was a medical concern for the astronauts. While at the Naval Medical Research Institute (precursor of the Naval Medical Research Command) in June 1959, each Mercury astronaut spent time in the human gradient calorimeter to test their heat tolerance. Designed by NMRI scientist and biothermodynamics pioneer Dr. Theodor Benzinger, the calorimeter allowed for the study of human temperature regulation, heat production and loss. It also enabled scientists to establish the heat exchange of each astronaut while allowing them to become familiar with their own body’s thermal response.

Capt. Ashton Graybiel helped design the Mercury Program medical recovery mission to ensure that the returning astronauts received needed and timely medical attention. Navy medical personnel designated to take part in recovery and post-flight check-up would pay special attention to the effects of high acceleration, weightlessness, rapid deceleration, and disorientation.

Graybiel’s plan was tested by Mercury’s inaugural flight in May 1961. After a 15-minute suborbital flight, Alan Shepard’s capsule parachuted down just over 300 miles southeast of Cape Canaveral. A Sikorsky helicopter retrieved Shepard and delivered him to the Essex-class aircraft carrier USS Lake Champlain (CV-39) where medical personnel and media anxiously awaited. Navy physician Capt. (later Rear Adm.) Robert Laning who performed the post-mission check-up later recalled: “It was as complete as it could be without X-rays, including a neurological examination. Of course, we had those facilities available in sick bay. If he had been injured, we would have determined that when he got off the helicopter.”