

USS PROVIDENCE
NOTEBOOK

By ROBERT A. HAMILTON
Day Staff Writer

Aboard the USS Providence — Every day is laundry day on a submarine cruising the Red Sea, so the apartment-sized washer and dryer combination in a closet-sized space near the diesel generators is one of the more important pieces of gear on this warship.

"If you're smart, you try to pack enough to last two weeks, just in case you miss laundry day," said Electrician's Mate 2nd Class Alex Sanders, who was waiting for his clothes one morning this week as he played "Lord of the Rings" on his Game Boy.

"If you're running maintenance or drills and you miss laundry day, you just created a major problem for yourself," Sanders said.

Two A-gang, or Auxiliary Division, sailors won the Navy Achievement Medal on the last Providence deployment for coming up with repairs that kept the washing machine, "Old Faithful," going after the controls failed.

It took them two days to map the circuitry and a few more hours to fashion a switch box that replicated all its functions, but before anyone ran out of clean clothes they had it in its rinse cycle.

"We nicknamed it the 'NAM' box because the guys who worked on it got the medal," said Electrician's Mate 2nd Class John E. Smith. "We had two or three weeks before we were scheduled to pull in at that time, so we definitely needed something to get it going."

Game of choice: cribbage

In the wardroom, officers engage in one of the most time-tested methods of blowing off steam when making a submarine war patrol.

Every night after dinner, and often after lunch, two officers square off, or four officers in pairs, for a fierce game of cribbage, a tradition since at least World War II.

"My dad was on diesel boats back in the '50s, and he played cribbage," said the sub's captain, Cmdr. Jon Kan.

When Lt. j.g. Carl Kohn drew a 20-point hand during one recent luncheon game — the average hand is four points, and the maximum is 29 — it eclipsed for a few minutes even discussion of the president's speech on Monday night.

The objectives of the game, particularly figuring out which combination of cards add up to 15, and memorizing arcane rules such as "right jack" and "last card," can help develop mental agility and the ability to recognize patterns, Kohn contends.

But he said there is another benefit as well: Cribbage is a big conversation starter, and he's trying to forge a team.

"That's what's most important to me — to get the guys to come to the table and get them talking," Kan said. "Video games today force young people into their own world."

The family of the ship's sponsor donated the cribbage board — lacquered wood with storage for the pegs and a set of dominos — when the ship was commissioned in 1985.

Jets vs. Giants

In the crew's mess, sailors play a video football game that can be projected on the big-screen television at the forward end of the dining hall. The graphics are so detailed that the cyber-crowd can be seen doing "the wave" in the background.

This week, it was two New York teams for Monday Night Football: Mess Specialist 2nd Class David Rojas as the Giants and Machinist Mate 2nd Class Louie "Leon" Leontakianakos as the Jets.

The contest drew a larger crowd than usually watches the evening movie, and generated copious amounts of noise, particularly in support of the Jets.

"They're not so much Jets fans as they hate the Giants," explained one sailor.

There are M&Ms and Starburst candies piled up on a table, and a pot of hot wings sends a pungent odor through the dining area.

A second chance

Almost five years ago, Master Chief Torpedoman Russ Neal reported as chief of the boat on the USS Miami just weeks before it deployed for combat operations against Iraq.

This month, fate gave him a second shot. Neal deployed with only a few days notice to the USS Providence.

He was midway through his tour at the Naval Submarine Support Facility in Groton early this month when the COB of the Providence had to leave the boat for medical reasons. When he got the call, he jumped at the chance.

"I guess I could say it's the challenge," Neal said. "I don't know, I guess I just enjoy doing something that I'm good at."

Neal has been in the Navy 26 years, but before NSSF had done only one shore tour, as a company commander at Navy boot camp when it was in Orlando, Fla. He's done time on eight submarines — the Skipjack, Trout, Scamp, Hyman G. Rickover, John Marshall, Dallas, Providence and Miami — as well as the tender Emory S. Land.

Neal left the Providence in 1998, just as it was deploying for the Persian Gulf, and reported as the chief of the boat on Miami. Months later, Miami left for the Gulf, where it took part in Desert Fox, the missile strike against Iraq.

Then, early the following year while on the same deployment, Miami reloaded at a submarine tender stationed in La Madeleine, Italy, and took part in Noble Anvil, the opening shots of the war in Bosnia. That made Miami the first submarine to fire in two theaters since World War II.

b.hamilton@theday.com

Breathing the right air is critical aboard submarine

Keeping atmosphere clean can be complicated process

By ROBERT A. HAMILTON
Day Staff Writer

Aboard the USS Providence — Cruising hundreds of feet below the surface of the Red Sea, the submarine USS Providence has to make its own air. And Electronics Technician 3rd Class David J. Horn is one of the men making sure that the ship is up to the job.

Scrubbers remove the carbon dioxide that the 140 crewmen add to the air with each breath. Generators replace the oxygen they consume. Filters keep dust and any other contaminant to a minimum.

From a console in a passageway midway between the crew's dining hall and the ship's office, Horn takes once-an-hour readings of the gases from the red digital displays, monitors whether there is any buildup of hydrogen gas, and checks for refrigerant leaks.

It's critical to the safety of the ship not only because it warns of any toxic compounds in the air, but because it allows the crew to detect any problem before it gets serious. If there's a serious problem, the crew would have to surface the ship to bring on clean air, which might be dangerous depending on where it is operating.

With the twist of a dial, Horn can sample air from any of eight stations on the boat, from the first compartment forward to the reactor compartment at the rear of the boat.

The Central Atmosphere Monitoring System, as it is known, will let him know if there is a problem. One afternoon this week, minutes after he had done his hourly check, CAMS blared its staccato alarm. When Horn got there, oxygen levels were reading zero.

"I was still conscious, so I knew that wasn't right," he said. He called in another electronics technician to repair a sensor that had failed.

More important even than the instant readings are the trends Horn and the other people taking the readings log on a chart all day. If there's a trend showing increasing carbon dioxide, they check the scrubbers. If there's an increasing level of Freon, they check the freezer for a leak.

"CAMS tells you what you're breathing in now, but for the why, you have to go to the logs," Horn said.

For several hours each day Horn roams the ship looking for fire, flooding or hydraulic leaks. He also maintains the contact evaluation plot to keep the Providence from hitting surface ships

as it comes up. "But this is the most important of my jobs," Horn said, standing in front of CAMS. "If we lose atmospheric control, we won't live long enough to worry about anything else."

□□□

Oxygen levels on a submarine are of critical acly the right amounts to live; and a surplus of the odorless, colorless gas can increase the risk of fire.

The boat's atmospheric pressures are set slightly above what one would experience at sea level, and the oxygen level is 19.5 percent, slightly lower than the 21.5 percent in the atmosphere.

"Oxygen is a very necessary component for a fire, so we don't like to get it too high," Horn said. "But people also get headaches if it goes below (about 17 percent)."

A submarine years ago was operating at a high atmospheric pressure and low oxygen level, when it opened a pipe to the outside to ventilate the boat.

"The abrupt change in oxygen caused 17 watchstanders to pass out almost instantly," Horn said. "So now, we log percentages and keep a very close eye on them."

Moisture or humidity is kept extremely low — just over 1 percent — because water in the air wreaks havoc on the sensitive electronic equipment. But it also dries out skin and mucous membranes, so sailors are instructed to drink constantly.

Carbon dioxide is also monitored. "If I could get it down to zero, I would get it down to zero," Horn said.

Hydrogen, generated when the boat charges its batteries, is generally under 1 percent.

"If it gets up to 8 percent, it's explosive, so we keep it as low as possible," Horn said. "We don't want it to get above 1 percent, really."

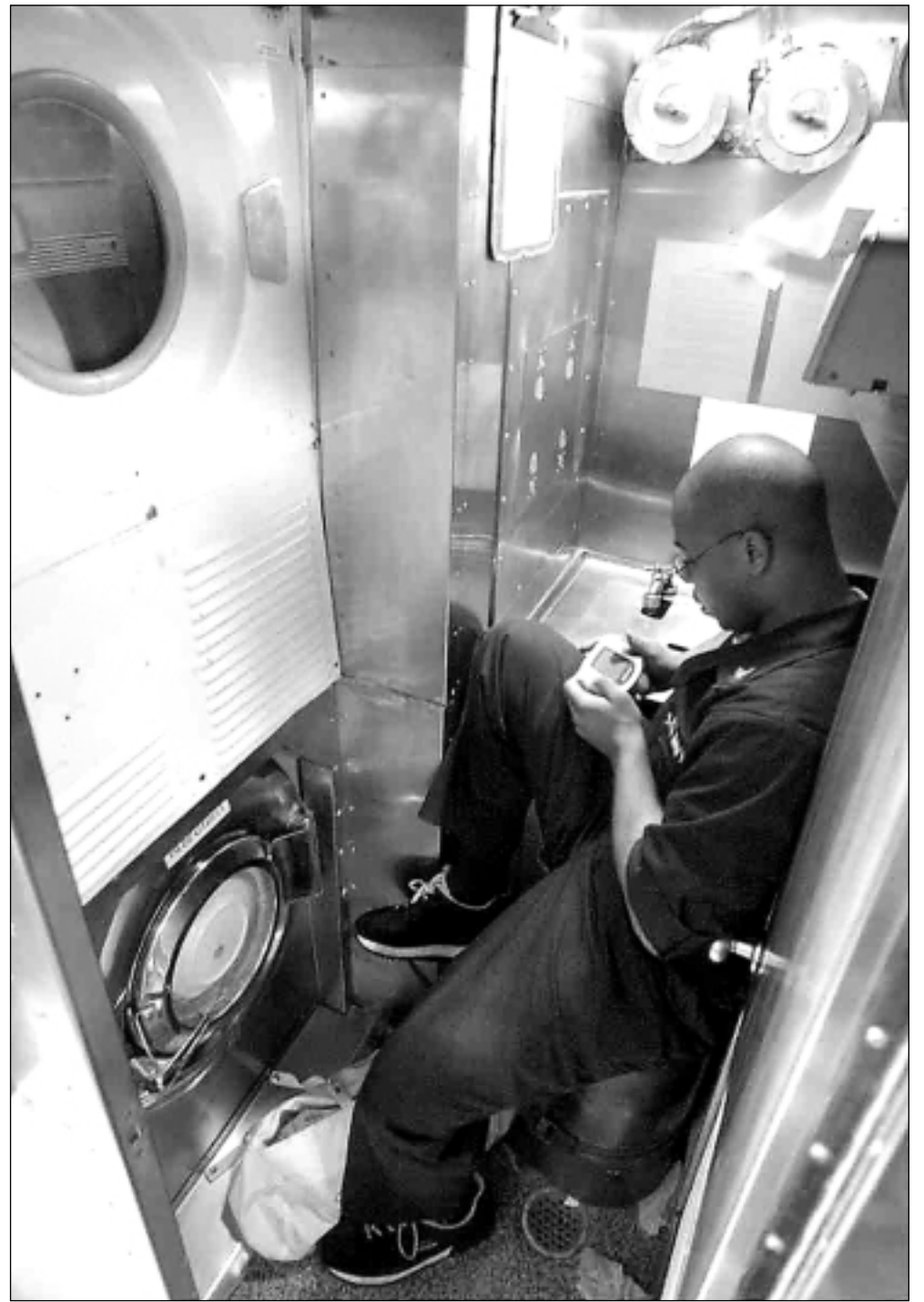
Atmospheric nitrogen makes up about 80 percent of what humans breathe, and on the ship it is generally at or just below that level.

At the end of the console are the displays for carbon monoxide and Freon, which can be detected at levels one one-thousandth of oxygen or the other gases, because they are so deadly.

"Those are the silent killers," Horn said. "We go low in oxygen and you're going to get tired and maybe have a headache. High oxygen, you might get giddy."

Carbon monoxide and Freon displace oxygen and trick your body into thinking it has enough. But the body can't use the other compounds and a person can suffocate without feeling starved for oxygen.

"You can't see them, you can't smell them,



TIM COOK / The Day

■ Crewman Alex Sanders plays a video game while doing his laundry — and breathing clean air — aboard the submarine USS Providence on Monday. Keeping the air at safety levels on a submarine is an exacting process critical for the crew's health and safety.

you can't taste them, and you can't tell when they go up," Horn said. "But you don't want to have them in the ship's air at any level." b.hamilton@theday.com

Saddam mocks ultimatum from Bush as war clock ticks

From A1

to locate weapons of mass destruction.

Turkey's government, meanwhile, said it would ask parliament to grant the U.S. Air Force the right to use Turkish airspace in an Iraq war and that a separate motion allowing in U.S. troops could be considered at a later date. Last month, the Turkish parliament rebuffed a resolution to let in tens of thousands of American soldiers, opening a northern front against Iraq.

At the same time the administration prepared for an invasion, it announced a series of steps at home to protect against terrorist attacks.

"We know that our interests have been attacked abroad. And we should prepare for potential attacks, either here or abroad at this time," said Homeland Security Secretary Tom Ridge.

The plan, dubbed "Operation Liberty Shield," heightens security at the nation's borders, airports, seaports and railways, at nuclear and chemical plants, and in elements of the nation's food supply and distribution system. Ridge said governors are being asked to deploy National Guard troops or extra state police to help.

At the State Department, Secretary of State Colin Powell said 30 nations had joined the administration's "coalition of the willing," and

that another 15 had quietly pledged support.

But at least two of the 30 nations — Spain and the Netherlands — have explicitly ruled out the use of troops to invade Iraq. Another, Japan, was identified as only a post-conflict member of the coalition.

State Department spokesman Richard Boucher said some of the countries "may put troops on the ground" and others may take on roles such as assisting in a defense against the use of chemical and biological weapons. Intelligence reports indicate that Saddam has given his field-level commanders the power to use chemical weapons, without instruction from the leadership, Pentagon officials said Tuesday.

With war looming in the Persian Gulf, the diplomatic and political fallout circled the globe.

In London, the House of Commons backed British Prime Minister Tony Blair's strong endorsement of Bush's policy, defeating an anti-war resolution and then voting in favor of using "all means necessary" to disarm Saddam. Blair has suffered in public opinion over his support of Bush, a stance that led three ministers to resign from his government this week in protest.

French President Jacques Chirac, whose country led opposition to war within the U.N. Security Council, said Bush's action would undermine future efforts at peaceful disarmament.

"Iraq does not represent today an immediate threat that would justify an immediate war," he said.

German Chancellor Gerhard Schroeder concurred, and said U.N. weapons inspectors should have more time to try to disarm Iraq of weapons of mass destruction.

Both European leaders were sending their foreign ministers to a Security Council meeting set for today in New York.

But by Bush's word, laid down in a stern speech Monday night, the time for diplomacy — and weapons inspections — had clearly come and gone.

Arab League Secretary-General Amr Moussa scrapped plans for a last-minute peacemaking trip to Iraq. And the U.N. peacekeepers boarded a plane out of Iraq, their mission at an end.

For his part, the Iraqi leader appeared on television wearing a military uniform for the first time since the Persian Gulf War in 1991.

Iraq's al-Shabab television, owned by one of Saddam's sons, said the decision to defy Bush's ultimatum was made in a leadership meeting chaired by the Iraqi leader.

"The pathetic Bush was hoping ... to achieve his evil targets without a fight," it said. " ... The march of struggle will continue against the American, English and Zionist aggressors."

U.S. mobile labs also poised in Kuwait for rapid action

By JUDITH MILLER
New York Times News Service

Kuwait City, Kuwait — The Bush administration has deployed mobile labs and new specialized teams of intelligence officials and disarmament experts to Kuwait to help the military search for weapons of mass destruction in Iraq as soon as war begins, according to senior administration officials.

Defense officials are also reaching out to former international weapons inspectors, as part of an ambitious, top-secret effort to rapidly find, secure and ultimately destroy the caches of chemical, biological and other unconventional weapons the administration asserts President Saddam Hussein is hiding.

In recent interviews, officials described the plans as one of the most

delicate and crucial missions of the war against Iraq. Never before, they said, has the United States proposed to disarm a nation of unconventional weapons by force.

The Pentagon has deployed several new tactical units called mobile exploitation teams or METs, with state-of-the-art equipment and novel tactics to locate and survey at least 130 and as many as 1,400 possible weapons.

In addition, officials said the military was making plans to find and interview hundreds of Iraqi scientists who worked on germ, chemical and nuclear-related projects, and to seek their cooperation in disarming Iraq of the weapons that the United Nations required Saddam to destroy after the Persian Gulf War in 1991.

The administration has assigned top priority to the hunt for weapons of mass destruction, officials said.

After months of relatively fruitless international inspections, the discovery of such arms, officials said, would vindicate the administration's decision to go to war to disarm Iraq. Conversely, failure to find them would leave the administration vulnerable to charges that it started a war needlessly.

Administration officials are determined to find Saddam's illegal weapons before he can send them out of the country and perhaps sell them to other rogue nations or terrorist groups.

The U.S. plans to eliminate Iraq's weapons were drawn up independent of U.N. weapons inspections in the country and reflect the Bush administration's belief that those inspections would never succeed in disarming Iraq in the face of resistance by Saddam.

Women 18 and over


Do You Want to Regain a More Satisfying Sex Life?

Has sexual satisfaction been more difficult to achieve despite desire for your partner? If you've experienced a change in the way your body responds to sexual stimulation, Female Sexual Arousal Disorder (FSAD) may be the cause. A clinical research study is testing an investigational drug to see if it can help women regain the physical sensation and pleasure associated with sexual arousal.

You may qualify if you:

- Are over 18 years of age and sexually active
- Have been in a stable relationship for at least six months
- Are willing to use contraception or, if you are past menopause, be taking Hormone Replacement Therapy (HRT)

Study participants will receive study-related care and be dispensed study drug or placebo at no cost.



Enrollment is limited, so call today.
877-307-6857
or visit our website at www.coastal-research.com

LE0881

OUR LOW SALE PRICES GO EVEN LOWER!
TODAY'S THE DAY!

ONE DAY SALE

NO COUPONS TO CLIP, JUST THE BEST SAVINGS OF THE MONTH!

SHOP TODAY 9AM-11PM
BOSTON 9-9 • FURNITURE STORES 9-10



142861