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STATEMENT OF  
CAPTAIN STEVEN W. JOHNSON  
COMMANDING OFFICER  
NAVY PUBLIC WORKS CENTER, NORFOLK  
BEFORE THE  
SUBCOMMITTEE ON READINESS AND MANAGEMENT SUPPORT  
OF THE  
SENATE ARMED SERVICES COMMITTEE  
ON  
CONDITION OF THE INFRASTRUCTURE, FACILITIES AND FAMILY HOUSING  
21 MARCH 2001

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# Regional Engineer/ PWC Commanding Officer

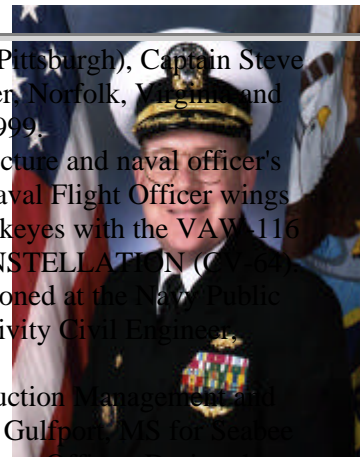
Captain Steven W. Johnson  
CEC, USN

Born in Evansville, Indiana but raised in Gibsonia, Pennsylvania (near Pittsburgh), Captain Steve Johnson became Commanding Officer of the Navy Public Works Center, Norfolk, Virginia, and the Regional Engineer for the Navy Region Mid-Atlantic on Oct. 29, 1999.

Captain Johnson earned a Bachelor of Science Degree in Naval Architecture and naval officer's commission with the U.S. Naval Academy Class of 1975. He earned Naval Flight Officer wings in 1976 at NAS Miramar, CA, and spent four years flying E-2B/C Hawkeyes with the VAW-116 Sunkings deploying aboard USS FORRESTAL (CV-59) and USS CONSTELLATION (CV-64). He transferred to the Civil Engineer Corps (CEC) in 1981 and was stationed at the Navy Public Works Center, San Diego, CA, where assignments included Senior Activity Civil Engineer, Assistant Production Officer, and Management Department Head.

In 1984, Captain Johnson earned a Masters of Science degree in Construction Management and Engineering from the University of California, Berkeley, and moved to Gulfport, MS for Seabee duty as the Naval Mobile Construction Battalion SIXTY-TWO Operations Officer. During the next three years his deployments included Puerto Rico, Okinawa and Spain. In 1987, studies at the Armed Forces Staff College followed Seabee duty, and in 1988 Captain Johnson joined Headquarters, United States Forces, Japan (USFJ) at Yokota AB. During his three years in Japan, Captain Johnson negotiated and coordinated Japan's Assistance in Kind support to DESERT SHIELD/DESERT STORM and construction of Iwo Jima facilities to support U.S. Navy air operations. In May 1991, Captain Johnson became the Public Works Officer and Officer in Charge of Construction, Naval Weapons Station, Charleston, SC, and in May 1993 he became the Special Programs Officer, White House Military Office, Washington, D.C. Between August 1995 and September 1997, Captain Johnson served as the NAS Sigonella, Sicily, Public Works Officer and Officer in Charge of Construction, initiating base recapitalization and housing lease-construction. From September 1997 to September 1999, Captain Johnson was the Deputy Director, Facilities and Engineering Division (N44) for the Deputy Chief of Naval Operations (Logistics).

Captain Johnson is a designated Seabee Combat Warfare Officer, Joint Service Officer, Defense Department Acquisition Professional and registered Professional Engineer. His decorations include the Defense Superior Service Medal, Legion of Merit with gold star, Defense Meritorious Service Medal, Meritorious Service Medal, Navy Commendation Medal with gold star, Navy Achievement Medal with gold star, Presidential Service Badge, and various other service medals and ribbons.



Mr. Chairman, members of the committee, I am CAPT Steve Johnson, Regional Engineer for the Commander, Navy Region, Mid-Atlantic and Commanding Officer of the Navy Public Works Center, Norfolk. I would like to thank you for the opportunity to discuss the condition of our facilities and base housing. As the Mid-Atlantic Regional Engineer, I have responsibilities for Navy facilities in the Virginia Hampton Roads area, at Philadelphia and Mechanicsburg in Pennsylvania, and for the Naval Air Station in Keflavik, Iceland. In the Hampton Roads area alone there are six major shore installations: Naval Station Norfolk, Naval Support Activity Norfolk, Norfolk Naval Shipyard, Naval Amphibious Base Little Creek, Naval Air Station Oceana, and Naval Weapons Station Yorktown. These six major shore installations comprise 56 square miles of real estate, 6600 facilities valued at \$9.6 billion, and support 82,000 active duty military, 107 ships and 38 aircraft squadrons.

As the Mid-Atlantic Regional Engineer, I follow the Navy's facility investment priorities of waterfront, airfield, training, bachelor quarters, and utilities, whether I am recommending MILCON projects, or determining what local OM&N projects to fund across the Mid-Atlantic Region. In addition to the Navy's investment priorities, I also consider mission accomplishment, economic efficiencies, and quality of service in establishing our local facility funding priorities. Based on available resources, urgent needs are being met with difficulty in the Region and I would judge our overall facility condition as marginally acceptable.

### **Waterfront Facilities**

The condition of our waterfront facilities, as reported by our Base Readiness Report (BASEREP), is C3. We estimate the maintenance backlog to be \$88M. Of our 85 piers and wharves, 50 were constructed before 1950. These piers are structurally inadequate to enable cranes to service ships from the piers, are too low to properly handle amphibious landing ships, are too narrow and have inadequate space between piers. Electrical power is insufficient to meet ships needs and will become even more critical as new classes of ships such as the LPD17 come on line. Safety and maintenance are also concerns because the steam lines are exposed to the tides below the pier decks and the shore power cables lie on the pier deck. We also spend \$2M per year replacing timber fenders. New double deck pier designs will address all of these issues. Our waterfront re-capitalization plan includes replacement of one pier per year for the next twenty years and will be capable of supporting future classes of ships.

### **Aviation Facilities**

The condition of our aviation facilities, as reported by our BASEREP, is C3. We estimate the aviation facility maintenance backlog to be \$90M. For example, the Naval Station Norfolk Chambers Field hangars are deteriorated WWII-era facilities, have high maintenance and energy costs, and can not effectively support modern aircraft squadrons' missions. Working conditions in the spaces are poor and have gotten press coverage as a cause for pilot attrition. They are 65% oversized – and therefore are more expensive to maintain than they should be. The present hangar layout is inefficient and requires

aircraft and vehicles to taxi excessively between hangars. The Chambers Field runways and taxiways also require refurbishment and upgrade to address modern aircraft loading requirements. These deficiencies are being addressed through an airfield re-capitalization and modernization plan that has been supported, to date, by Congress. The total re-capitalization plan will take nine years, cost \$160M, of which \$46M is for pavement and \$114M for hangars, and demolishes 42 facilities.

Improvements to some facilities have been made. For example, at Naval Station Norfolk two modern hangars were constructed in 1994 that are sized for modern aircraft, are energy and maintenance efficient, and provide the right environment for productive aircraft maintenance and day to day squadron operations.

Nevertheless, there remain aviation facility deficiencies that adversely affect day to day operations. An example is 50 year old Hangar 200 at Naval Air Station Oceana which has been highlighted in the media as a Navy facility in poor condition. The hangar door surface coating has completely failed and the door is covered with rust. The antiquated gas heat system is expensive to maintain and fails frequently. Some sections of the piping system have burst. The hangar doors routinely fail presenting a safety hazard and resulting in significant energy loss when they are stuck in the open position. Aircraft maintenance production suffers as a result of having to manually open the doors and as well as the exposure of sailors to the elements.

### **Bachelor Housing**

The condition of our bachelor housing facilities, as reported by our BASEREP, is C3. We estimate the bachelor housing and galley facility maintenance backlog to be \$67M. Although we have completed more than \$96M in renovation and MILCON projects over the past 3 years, in order to upgrade all remaining barracks to 1+1 standards, there are still 10 barracks which need to be converted at an estimated cost of \$79M.

The recently completed \$7.9M Carter Hall renovation at Naval Station Norfolk is an outstanding example of 1 + 1 bachelor quarters standard. This is a first class, showcase quality facility and was first utilized by sailors from the USS Cole. On the other hand, bachelor housing that has not been renovated to 1+1 standards is generally or poor material condition. For example, Groshong Hall at Naval Station Norfolk was built in 1973. It has central head facilities and the majority of its sailors are three to a room. The sinks in the heads are separating from the walls, the showers leak to the floors below and there is water damage to walls and floors.

### **Family Housing**

The condition of our family housing facilities, as reported by our BASEREP, is C2. We estimate the family housing maintenance backlog to be \$55M. About 93% of Navy families in the Hampton Roads region live in private sector housing. Although private sector housing is plentiful, expenditures for suitable housing often exceed junior enlisted pay grade housing allowances. The Region manages 4092 enlisted and officer homes, of

which 69% have been renovated within the past seven years. Two neighborhoods, totaling 678 homes, are newly constructed or currently under construction. About 500 homes require renovation and there is a requirement deficit of more than 800 homes. The requirement for affordable housing, particularly for junior enlisted families, is being addressed through a pilot program with the Virginia Housing Development Authority (VHDA). VHDA will construct 80 housing units on government land that will be leased to junior enlisted families under a Navy privatization initiative. Additional privatization initiatives are being considered for the Hampton Roads Area.

### **Training Facilities**

The condition of our training facilities, as reported by our BASEREP, is C3. We estimate the training facility maintenance backlog to be \$42M. In total more than 3 million square feet are designated for training use in more than 200 facilities. Nearly one third of this space is categorized as substandard or inadequate. A typical training facility is Building 3504 at Little Creek which houses the Expeditionary Warfare Training Group Atlantic. 22,000 students per year train in the facility. Classes have been postponed because of HVAC failures. The power supply is antiquated and inadequate to support the electrical load of the training equipment. Another example is Building SP-381 at Naval Station Norfolk. Its 35-year-old roof has deteriorated beyond economical repair and leaks during rainstorms. The walls are soiled and discolored from age and high usage. The suspended ceiling is water stained and damaged. Classroom training is frequently interrupted during rainstorms. The 16-year-old HVAC system is in need of replacement.

### **Utilities**

The condition of our utility infrastructure, as reported in our BASEREP is C3. We estimate the utility maintenance backlog to be \$122 million for the region. As an example of the impact of these utility deficiencies, nuclear and non-nuclear ships at Norfolk Naval Shipyard have experienced numerous faults and outages as they are served by underground electrical cables that are over sixty years old. Mobile electrical transformers have had to be placed at Pier 23 at Naval Station Norfolk to temporarily alleviate reliability problems with shore power. Two nuclear submarines at this pier recently lost shore power because of problems with these mobile units. The substandard condition of forty year old waterlines at NAVSTA Norfolk have resulted in low water pressure and low water quality to bachelor quarters and family housing occupants. The facilities at the Atlantic Fleet Headquarters and NATO compounds must rely on individual emergency generators in part because of the reliability of the forty year old substation and switchgear that serves these compounds.

### **Other Facilities**

The condition of our remaining facilities is generally C3. We estimate the remaining facility maintenance backlog for the Hampton Roads shore facilities to be about \$343M. Programming decisions based on Navy priorities enable us to maintain and plan the re-capitalization of our waterfront, airfields, bachelor and family housing, training facilities,

and utilities. We need to stay this course and continue these investments. However, these decisions leave few resources for other facility requirements such as administrative buildings, personnel support facilities, logistical facilities and roads. The consequence is many of these facilities are in poor condition and adversely affect the quality of service for our sailors and civilian employees. Examples are provided in the hand out and include:

- At NSA Norfolk, the Commander Naval Surface Forces Atlantic staff of 108, who are managing the manning, training, ship maintenance, and funding for the Atlantic Fleet, are housed in a wood frame building constructed in 1942 that has a \$5M maintenance backlog. Work conditions are very poor. The windows and walls leak, there are frequent HVAC failures, the electrical system has deteriorated, there are structural problems, and steam leaks in crawl spaces.
- There are dozens of 40 to 60 year old wood frame buildings throughout the region. Nine have recently either been condemned or restrictions have been placed on them because of structural failures or inadequacies. At Naval Support Activity (NSA) Norfolk, the Atlantic Fleet Communications Department had to be relocated on an emergency basis when their primary building had a wood truss frame failure and was subsequently condemned as structurally unsafe.
- While many facilities at Naval Station Norfolk have similar problems, the Commander Naval Air Force Atlantic command building roof and walls leak so badly that plastic tarps are used to cover mechanical systems. Buckets catch water and there is water damage throughout the interior.
- Building 31 at Norfolk Naval Shipyard (NNSY) in Portsmouth, used by shipyard engineers, is an historic structure built in 1866. Typical of more than 30 buildings in the “old yard” area of the base, this admin facility has been fixed and fixed again, pending funding of a \$3.4 million renovation project. One half of the timber roof recently collapsed, causing us to move our 150 people overnight. The result is an unplanned repair expenditure of \$250K and significant production time and cost impacts to several submarine and ship overhaul projects.
- The Regional Child Development Center (CDC) supporting NNSY and the Naval Medical Center in Portsmouth is undersized, with a capacity of 57 for a 372-child requirement. Qualified, local private childcare is virtually non-existent. The building is the only one in the region with a C-4 rating: it has no sprinkler system, inadequate toilet facilities, and a chronic mold infestation that caused a complete CDC shutdown for 30 days last September. Elimination of this health concern would require complete replacement of interior architectural and mechanical systems. The best economic solution is MILCON (P-333) that has been unprogrammed for 15 years. P-333 (\$6.4M) would save over 300 sailors an average of \$128 per month in childcare costs.

- At the Little Creek Naval Amphibious Base there are many temporary wood-frame constructed in 1943 with most building systems failing.
- A fourth of all Naval Station Norfolk roads are classified as poor or worse. At the waterfront more than a thousand sailors park their cars in dirt parking lots.
- Pre-commissioning units consisting of groups of 60 sailors needed a facility to work from and were given a building on the demolition list as it was the best facility available. They fixed the building to make it habitable through self-help. Six months later it was discovered that termites had caused structural damage to the building and we had to evacuate them to another building earmarked for demolition. We're still awaiting funding to renovate a facility for pre-commissioning units.

There are also many success stories where new operational or personnel support facilities have come on line and represent the high standard we are proud of and want to attain across our facility inventory. Examples include:

- A new \$13.3M Air Terminal has just been finished at Naval Station Norfolk. This facility has dramatically enhanced the quality of service for sailors and airmen. This terminal is one of the busiest terminals in the Air Mobility Command system and we now have a first class facility that handles more than 10,500 passengers per month and eliminates previous problems of aircraft, cargo, and passenger overcrowding.
- The new \$4.8M gymnasium at Naval Air Station Oceana is a modern, top quality sports facility.
- The Youth Center at New Gosport in Portsmouth renovated an undersized existing youth center facility and connected a refurbished warehouse to make it a modern, top quality facility.

One of the most effective means to reduce costs is to reduce our maintenance footprint. Accordingly, the Navy and Mid-Atlantic Region has been emphasizing demolition as part of our RPM program for several years. Since 1998, including plans for this year, we will have demolished 259 buildings and have removed 874K square feet and \$19M of maintenance backlog from the inventory. Many more structures could be demolished, but other facilities first need to be renovated and occupants moved in order to make the worst structures available for demolition.

The Mid-Atlantic Region is also stretching available funds by pursuing energy conservation initiatives using third party financing such as installing energy efficient lighting or air conditioning systems. Working with local utility companies we jointly develop projects where the savings pay for the project construction and financing, and when the loan is paid off the Navy accrues all future savings.

In summary, the condition of facilities in the Hampton Roads area is mixed. There are new modern facilities such as barracks, hangars, and piers, and there is a long-term plan

in place to re-capitalize our waterfront and airfields. However, more funds will be needed across the board to reduce the overall maintenance backlog, to improve the quality of service for our sailors, and to achieve balanced facility excellence.

I'm happy to answer any questions you may have.