FIELD ESSAY

What it cost to train me

What the Navy could count at the schoolhouse, and what it took to teach the next sailor on the flight deck.

By Carrie Shuster

I helped train 93 sailors to become plane captains. Usually it was one sailor and me, alongside the same Super Hornet for a flight day that could run ten hours. While they learned to inspect the aircraft, I still answered for the inspection. My paycheck was the same either way. Years later, looking through the Navy's budgets, I wanted to know where those hours went.

Follow the Navy's training dollars

FY2009, during my service. Read the four splits in order. Follow the rust-colored branch from one panel to the next, ending at specialized skill training. Each panel resets the scale so its smaller accounts stay visible.[1,2]

01 Department of Defense — $665.86B



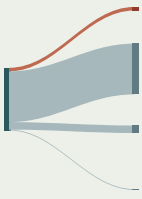
Department of the Navy	**$166.77B**
Department of the Army	**$235.75B**
Department of the Air Force	**$163.14B**
Defense-wide	**$100.21B**

02 Department of the Navy — $166.77B



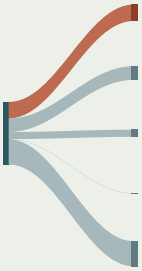
Operation and Maintenance, Navy	**$39.85B**
Other department accounts	**$126.92B**

03 Operation and Maintenance, Navy — $39.85B



Training and Recruiting	**$2.26B**
Operating Forces	**$32.30B**
Administration and Servicewide Activities	**$4.76B**
Mobilization	**$534.69M**

04 Training and Recruiting — $2.26B



Specialized Skill Training	**$593.00M**
Flight Training	**$491.42M**
Recruiting and Advertising	**$256.79M**
Recruit Training	**$11.17M**
Other training and recruiting lines	**$906.30M**

Ribbon widths show each branch's share of its parent. Figures show total obligational authority, the funding available for commitments, in FY2009 dollars. B = billion, M = million. "Other" branches group the remaining accounts or lines. The Department of the Navy includes the Marine Corps. Top-level rounding leaves a $1 million difference between the published total and its parts.[1,2]

ATSUGI, JAPAN / USS GEORGE WASHINGTON

Who signs for the aircraft?

For every four dollars in the Pentagon's FY2009 budget, about one went to the Department of the Navy. I followed it down to the line for specialized skill training. The Navy had nearly $593 million there to teach people who worked on ships, submarines and aircraft. My job was somewhere in that line.[1,2]

A schoolhouse record gets me closer. An earlier study matched the courses for each Navy job to schoolhouse costs. It put the initial training for an Aviation Electrician's Mate, my rating, in Pensacola at $13,183 in 1996 dollars. Boot camp at Great Lakes added $6,320. Together those two stages came to $19,503 per sailor in FY1996 dollars, more than a decade before I enlisted. The estimate included student pay and supplies. It left out instructor salaries because one fewer student would rarely change how many instructors the Navy paid.[3]

INSIDE THE F/A-18 SQUADRON STUDY

$11.59 million

Estimated annual cost of enlisted sailors' time in recruit, technical and specialty schools across 33 F/A-18 squadrons, including two fleet replacement squadrons.[4]

651 positions

Authorized for Aviation Electrician's Mates across those squadrons. The dollar figure covers every enlisted rating in the study.[4]

Then I found my squadron in a table. A 2008 study names VFA-102, the Diamondbacks, among the F/A-18 squadrons it examined. Across those squadrons, the analysts could estimate the annual cost of the time enlisted sailors spent in formal training. They counted 651 authorized positions for aviation electricians like me. The study pooled training costs across the enlisted jobs, so it can't tell me what VFA-102 spent on one electrician. I was one of the sailors doing that work in Atsugi and aboard USS *George Washington*.[4,6]

On the flight deck, qualifying as a plane captain meant an experienced plane captain had to supervise me. The instruction in effect when I joined was explicit about who carried responsibility for the inspection while a trainee learned. Before I could take it on, there were written and practical exams and a board. The Navy even had a form for the designation.[5]

The schoolhouse estimate priced two stages of a sailor's training. The squadron study priced student time across 33 units. Neither followed a pair of sailors through an inspection. For that part of the story, I have to start with what I remember.

> What changed when I qualified was whose name could go on the inspection. By then, someone had spent enough time beside me for that name to be mine.

SOURCES AND ACCOUNTING NOTES

1. **Department of Defense, National Defense Budget Estimates for FY 2011**. Table 6-3, FY2009 current dollars, p. 78.
2. **Department of the Navy, FY 2011 President's Budget**. Operation and Maintenance, Navy, Vol. I. Exhibit O-1, FY2009 actuals, and OP-5, 3B1K.
3. **Federico E. Garcia and colleagues, Effectiveness of the Voluntary Education Program**. Center for Naval Analyses, 1998. Appendices A–B, tables 5–6.
4. **Steven W. Belcher and Peter H. Stoloff, Enhanced Billet Analysis Tool**. Center for Naval Analyses, October 2008. Example 3, p. 45.
5. **Naval Aviation Maintenance Program, COMNAVAIRFORINST 4790.2A**. February 15, 2008. Chapter 10, §10.14.3.5, plane captain qualification.
6. **Commander, Naval Air Forces Pacific, VFA-102 squadron history**. The Diamondbacks' Super Hornet assignment at Atsugi, Japan.

VFA-102 / ONE SAILOR'S TIME

Then I was the one teaching

I served five years in the Navy. My rating was Aviation Electrician's Mate. Passing my advancement exam meant studying on my own time. On duty, most of my training went toward becoming a plane captain, a qualification that wasn't on my AE exam. I could spend a day with someone checking my work on an aircraft and still have the AE exam material waiting for me after my shift.

Once I was qualified, sailors came back to train with me over several flight days. Some took weeks, others months. The 93 I remember were individual people. I also trained sailors for flight deck and troubleshooter qualifications. Some other positions took about four hours per session. For a plane captain, the flight schedule decided when we were done.

Reconstructing a training hour

Across my five years, I estimate that the days I worked flight operations added up to two and a half years. That's roughly 913 flight days, about 684 of them on the carrier deck. I can use that to check a training estimate. The count includes days I was still learning, days I had another sailor beside me, and days when I had my own work to do.

The number I'd most like to recover is how many flight days each trainee spent with me. With an average of three separate days each, 93 sailors would account for 279 days, close to one in three of my flight days. Three is an assumption. Counting every day until a sailor qualified would include days we spent apart.

What would the Navy have had to pay?

A ten-hour day with a trainee was also a ten-hour day working on the aircraft. One way to value the supervision is to ask what those hours would be worth at a comparable wage. I used $25.47 per hour, the 2009 U.S. average for aircraft mechanics and service technicians. That figure excludes benefits and overhead. A carrier-qualified replacement could have cost a different amount.[8]

Sessions per sailor	Flight days and share of ~913	Supervised hours	Wage value (2009 $)
2	186 days · 20%	1,860	**$47,374**
3	279 days · 31%	2,790	**$71,061**
5	465 days · 51%	4,650	**$118,436**

In the three-session example, the hours are worth about $71,000 at that wage. If the squadron had needed to buy relief for a quarter of them, the extra wages would have been about $17,800, assuming other expenses stayed the same. Paying me a hypothetical $5 teaching premium for each supervised hour would have cost $13,950. The amount of extra pay I actually received for teaching was zero.

My paycheck can tell you what I earned. A qualification record can tell you when another sailor was ready to take responsibility for an aircraft. What neither record tells you is who stayed beside that sailor while they learned the job. For 93 of them, I was one of those people.

7. **Navy Advancement Center, Bibliography Frequently Asked Questions.** Exam references vary by rating, paygrade and cycle. Carrie's account describes her own exam. For the separate plane captain designation, see source 5.

8. **U.S. Bureau of Labor Statistics, May 2009 Occupational Employment and Wages.** National wage estimates, table 1. Dollar examples use wages only and round to the nearest dollar.