

VERBATIM TRANSCRIPT

REMARKS OF BEN R. RICH

F-117 FINAL DELIVERY CEREMONY

JULY 12, 1990

General Dugan, General Cranston, Colonel Tolin, Colonel McGuire, ladies and gentlemen. Today is a very special day, for as we turn this last F-117A over to the Air Force, we celebrate the completion of the production phase of a unique aircraft program.

It's not often that one has the opportunity to develop and field an aircraft that represents a true technological breakthrough. And the F-117 is just that--the world's first very low observable fighter aircraft. It certainly is an odd-looking flying machine ... all back, flat surfaces, highly swept wing and V-tail, and grids over the inlets. Yet it is a sterling example of what American ingenuity and hard work can create in response to a critical need.

In the 1970s, the Soviet Union had begun developing and deploying new early warning radars, surface-to-air missiles, and fighter aircraft. These new systems posed a major threat to our conventional fighter and bomber forces. At the same time, technology breakthroughs in very low observables were emerging, which offered the potential to counter the menacing threat buildup. And, working together, the Defense Department, Air Force, and Lockheed structured the F-117 program to capitalize on these breakthroughs by rapidly developing and fielding an operational stealth fighter. The result is the F-117A stealth fighter, an aircraft with dramatically reduced signatures, which can avoid detection, penetrate heavily defended air space, and attack critical targets with extreme accuracy.

Prior to the program go-ahead, give dedicated air staff officers reporting to Gen. Al Slay clearly defined a set of top level requirements for the F-117 weapon system. Then, a system program office with a minimum number of people was established at the Aeronautical Systems Division, under the direction of the late Gen. Dave Englund, then a colonel. Similarly, a small Lockheed team was also established under the leadership of Norm Nelson.

The F-117 SPO and Lockheed program office were supported by other organizations and groups, whose efforts were crucial to the program. These include the Air Force Office of Special Investigations, which developed and implemented effective security procedures for the program. The Air Force Logistics Command's Sacramento Air Logistics Center, which provided secure, specialized logistics support including supply support. And the Tactical Air Command, which worked closely with Lockheed and the SPO to initially define operational requirements and later establish a secure, full operational and maintenance capability at the Tonopah Test Range Airfield.

Also working closely with the SPO and Lockheed as full partners were contractors such as General Electric, Honeywell, Airesearch, and many others. And today, we are honored to have representatives from 31 F-117 subcontractors with us.

Working together, this F-117A team established streamlined management methods with clear lines of communication and regularly scheduled meetings, but with a minimum amount of formal reporting. An appropriate amount of oversight was provided, but the team was not overburdened. We created a non-adversarial, problem-solving environment built on trust and commitment. Together, we guided the program through development and production and into operational service while maintaining the highest standards of program security.

As a result, the F-117A was developed and fielded in record time for modern fighter aircraft. Only 31 months after go-ahead, on June 18, 1981, Lockheed test pilot Hal Farley flew the F-117 for the first time. And with concurrent development and production, initial operational capability was achieved only 28 months later, in October 1983. In other words, the operating unit, the 37th Tactical Fighter Wing, was ready to go to battle only five years after the program go-ahead. That's roughly half to time of conventional aircraft procurement programs. And here we are today, roughly nine years after the program start, delivering the last of 59 production aircraft.

But not only was the F-117 done quickly; it was done at low cost. At the same time we applied breakthrough stealth technology, we used proven components from other aircraft to reduce cost and risk--General Electric F404 engines, F-16 flight control computers, F-18 cockpit displays, and many others. Total Air Force development cost to date is very low compared to other modern-day fighters--less than \$2 billion. And the average unit flyaway cost for the 59 production aircraft is only \$42.6 million including all government furnished equipment. Very favorable compared to other fighters.

We built the F-117 at two a season, eight airplanes per year, and achieved a 78 percent learning curve. The total production program, by the way, was fixed price, and we did not lose any money. In addition, the Skunk Works guaranteed range, radar cross section, and bombing accuracy. And thanks to the hard work of many of you, we met all of our guarantees.

But the bottom line has been the outstanding performance of the F-117 in service with the 37th Tactical Fighter Wing. Their highly motivated pilots and crewmen have set new standards for fighter readiness, reliability, maintainability, and safety. The unit has consistently received superior ratings in operational readiness inspections. They won the TAC commander's award for top performance in aircraft maintenance, and they have the best safety record of any modern jet fighter.

The F-117A program has been a tremendous team accomplishment, and many of you here today are the reason for the program's success. It's been your personal commitment and hard work, for years in total secrecy, that made it happen. And now that the veil of secrecy has been lifted, it is gratifying to see that the outstanding accomplishments of the F-117 team are being recognized publicly.

Just recently, Norm Nelson, Alan Brown and Dick Cantrell were selected to receive the American Institute of Aeronautics and Astronautics Design Award for their accomplishments on the F-117A. And finally, the Air Force/Lockheed development team was recently awarded the 1989 Collier Trophy for the greatest achievement in aeronautics or astronautics.

And so today we complete a chapter in the F-117A story with the deliver of the final aircraft. But, in many ways, it is still just the beginning. The 37th is now at full strength and just beginning to be fully utilized as a high-leverage, integral unit within the Tactical Air Command. And we are keeping the F-117 at the technology forefront through a weapon system improvement program currently underway. These and future upgrades will ensure the F-117 remains effective well into the 21st century. The F-117A has set the benchmark for low observable technology. All future aircraft will incorporate some level of this technology. The nation's investment in this highly successful program has been a defense dividend that has yielded a peace dividend for all of us and which will continue for many years to come.

I thank you all for a job well done. You have given the Lockheed Skunk Works another kudo in the tradition of the U-2 and the SR-71. Let the nation know we are ready to do it again.