

[web.archive.org](http://web.archive.org)

## Conversation With 1st Air Force Commander, Maj. Gen. Larry Arnold — January 2002

22-28 minutes

---



The mission of the North American Aerospace Defense Command, or NORAD, formerly involved tracking and monitoring all aircraft entering the borders of the United States and Canada. Since the 11 September terrorists attacks, that mission has expanded to include tracking and monitoring aircraft flying within the

United States. While the Federal Aviation Administration still remains responsible for domestic airspace, NORAD forces now respond to FAA requests to assist with any threatening or hostile aircraft. To meet this expanded air defense mission, NORAD employs over 100 aircraft in a high state of alert or in combat air patrol sorties over selected areas of the United States. These missions will continue as long as the Secretary of Defense deems necessary.

In addition to employing more aircraft, NORAD has taken other measures to cover this expanded mission, such as maintaining continuous communications with the FAA, obtaining comprehensive access to FAA radar data, and

positioning radar to combat new threats. When the United States invoked Article 5 of the NATO charter after the September attacks (a historical first), NATO AWACS aircraft became available to assist US AWACS to enhance NORAD's capability further.

The commander of the Continental United States NORAD Region, Maj. Gen. Larry Arnold, plays a vital role in Homeland Defense and in Noble Eagle, the name of the military operation designed to respond to the terrorist attacks. As the commander of 1st Air Force for Air Combat Command, he provides the forces necessary for the unilateral defense of the United States.



A combined 1st Air Force command post and CONUS NORAD Region Air Operations Center perform the NORAD air sovereignty mission for the continental United States. Located at Tyndall AFB, Florida, 1st Air Force has been an Air Combat Command organization since 1993. Its subordinate units are located throughout the continental United States. With the transfer of responsibility for continental air defense from the active duty component of the Air Force to the Air National Guard in 1997, 1st Air Force became the first numbered air force to be composed primarily of citizen airmen.

Maj. Gen. Arnold is a command pilot with more than 4,000 flying hours in nine different aircraft, including the F-16 and the F-15. Code One editor Eric Hehs interviewed Arnold at Tyndall last December.

**How have your responsibilities changed since 11**

## **September?**

Before 11 September, we were more concerned with air sovereignty than with air defense. That is, we were more concerned with who was entering or exiting our borders than we were with protecting those borders against military threats. Our emphasis on the air defense role started fading with the meltdown of the Soviet Union. However, we still maintained an air defense capability.

On 11 September, our focus on air defense was renewed. Within eighteen hours, we went from fourteen aircraft on alert at seven locations to nearly 300 airplanes on alert at twenty-six locations. We maintained sixteen separate orbits for three days. We published air tasking orders, set up channels to communicate with other responsible organizations, and maintained positive command and control over these assets in a very short timeframe. Without the infrastructure we had maintained, we would not have been able to respond as well as we did on 11 September.

We have to produce air tasking orders every day and be prepared to thwart a terrorist attack of any kind coming from outside or from within our borders. That phrase, “within our borders,” explains how our mission has changed. We always viewed an attack from within our borders as a law enforcement issue, not as an air defense issue. The reality is that any attack within the United States by any type of weapon has become an air defense issue.



## **How has your life and your mission changed?**

My life, and the lives of most of our people around here, was pretty stressed for the first month. We had thirty-eight people

assigned to the 701st Air Defense Squadron, which runs our air operations center, or AOC. Clearly, we couldn't cover the expanded duties of this organization with thirty-eight people. We emptied the numbered Air Force side of the house and moved everyone over to the AOC, which gave us about 160 people to call upon.

For the first month, most of us worked fourteen-hour days. Some of us worked longer hours than that. As more people arrived, we began working twelve hours on, twelve hours off, seven days a week, with no days off for the first month. Gradually, we gave people a day off. Our goal now is to work forty-eight-hour weeks with two days off a week. Today, we have over 350 people in the AOC to sustain our operations.



**Describe how events unfolded at the 1st Air Force on 11 September.**

The 1st Air Force was right in the middle of an exercise called Vigilant

Guardian. I was at the AOC. We had emptied our numbered air force for the AOC because we are one of the few numbered air forces that don't have an air operations group, which normally staffs an AOC. We had been in the exercise for about four days. As I walked out of a video teleconference with NORAD, someone came up and told me that the Northeast Air Defense sector had a possible hijacking. My first thought was the hijacking was part of the exercise. But I knew otherwise by the time I talked with the commander of the Northeast Air Defense Sector. He had aircraft on battle stations. You might ask why the aircraft weren't scrambled immediately. The procedure is that the FAA contacts the

national military command center whenever there is a problem. They, in turn, go to NORAD to see if assets are available. Then the Secretary of Defense grants approval to intercept a hijacked airplane, which has heretofore been classified as a law enforcement issue.

I decided to give the go-ahead to scramble and work out the details later. Just about the time the airplanes were airborne, I looked up at the television in the AOC. Like everyone else, I saw the smoldering north tower of the World Trade Center. We watched the second airplane as it flew into the south tower on live television. We received a call of a second hijacking sometime after that. Then we began getting calls of other potential hijackings. Not all the calls were true. These hijacking reports added to the confusion. We had not confirmed that the hijacked airplanes were the ones that had hit the towers. When the second tower was hit, though, I strongly suspected this was the case.



By this time, we were watching United Flight 93 wander around Ohio. We got another call of a Delta flight being hijacked in the Cleveland area. We were trying desperately to find military fighters airborne in that part of the United States. We found some aircraft out of Michigan. We also had a National Guard unit in Toledo, Ohio, that was flying.



The Northeast Air Defense commander scrambled alert aircraft out of Langley AFB, Virginia, F-16s deployed to Langley from the 119th Fighter Wing at Fargo, North Dakota. Many people believe that we scrambled these aircraft to intercept American Flight 77, which had taken off from Dulles

and was heading back to the Washington, DC, area. Flight 77, which had been called as a potential hijacking, dropped off the radar picture. We were receiving many reports of hijacked aircraft. When we received those calls, we might not know from where the aircraft had departed. We also didn't know the location of the airplane. We scrambled from Langley and put the aircraft over the top of DC. The scrambled aircraft took off before American Flight 77 crashed into the Pentagon, but they were about eight minutes out from DC.

The United States was clearly under attack. We wanted to have aircraft in position to defend against further attacks on Washington, DC, and New York. At the same time, we saw United



Flight 93 out there. We wanted to go out and meet it. But we were not going to do anything until the airliner got closer to DC. The flight came within about 200 miles of the DC area when, as we found out later, the passengers rushed the cockpit and the airplane crashed in Pennsylvania.

We had the North Dakota F-16s from Langley over DC. About twenty minutes later, F-16s from the 113th FW of the DC Guard showed up below them. The 113th got a direct call from the Secret Service and got airborne. They did a great job. They didn't know F-16s from the 119th were above them, and the 119th didn't know the 113th was below them. Once they found out, the pilots got together. A pilot from the 113th, a recent graduate of the Fighter Weapons School, organized the combat air patrol. He put the DC guys to the north and the Fargo guys to south.



People were generating aircraft and getting airborne. The Northeast Air Defense Sector diverted some tankers to support the fighters covering New



York. Our picture over DC was pretty poor. And the communication was poor. So the aircrews themselves coordinated the refueling and the combat air patrols. An AWACS flying a training mission nearby arrived. The AWACS could talk to the Northeast Sector and provide a better picture to them.

Another AWACS was flying a training mission off the coast of Florida. President Bush was in Sarasota. We moved the AWACS towards the president. Then we received tasking



from the Secret Service through the Joint Staff and NORAD to follow the president and protect him. I had set up an arrangement with their wing commander at Tinker some months

earlier for us to divert their AWACS off a normal training mission to go into an exercise scenario simulating an attack on the United States. The AWACS crew initially thought we were going into one of those simulations.

We were not told where Air Force One was going. We were told just to follow the president. We scrambled available airplanes from Tyndall and then from Ellington in Houston, Texas. The Ellington F-16s chased Air Force One and landed with the president at Barksdale AFB in Louisiana. The president flew from Barksdale to Offut AFB, Nebraska, and then back to Washington, DC. We maintained the AWACS overhead the whole route. I'd like to emphasize that everyone

involved that day had a warrior spirit, whether they were flying tankers, fighters, or AWACS. They reacted in an admirable way.



### **Was the 1st Air Force involved in the orders to ground all aircraft?**

We are all trying to determine the sequence of events. First, the NORAD commander issued a SCATANA order, or security control of air traffic and navigation aids, which gave him the authority to ground commercial air traffic. But I believe the FAA shut down all aircraft from coming into the United States shortly before the SCATANA order was given. The FAA also stopped all air traffic from taking off. Aircraft already airborne were then diverted from large cities into secondary locations. Many airports in Canada had lots of diverted airplanes on their ramps. We have a photo taken over Halifax, Nova Scotia, that shows forty-one airliners sitting on an inactive runway with about 6,000 people waiting to be cleared to get off.

Then we created a free fire zone over the nation's capital. Anyone airborne who did not immediately turn away from the center of town or who did not land could be shot down. We had a few instances of people flying in the area who were unaware of the circumstances. Our military pilots deserve a lot of professional credit for getting those aircraft on the ground.

By the end of the day, we had twenty-one aircraft identified as possible hijackings. The last one was en route from Madrid, Spain, to JFK International Airport. The Northeast Air Defense Sector, which talked to the pilot, told us the airplane



had turned around and was on the ground back in Madrid. Upon getting that word, Air Force One was cleared to go back to Washington, DC.



### **What is your part in Operation Noble Eagle?**

Noble Eagle is an expansion of the NORAD mission. The focus is on NORAD's more traditional mission of air sovereignty and air defense not only looking outward but also turning inward. So it is a more pervasive look at air defense. Noble Eagle allows us to fly orbits over certain cities. The Secretary of Defense has made no secret of this coverage. We continue orbits over New York and Washington, DC. We fly random combat air patrols over other locations. We also maintain enough aircraft on alert status to go back up and perform all of these CAPs that we have identified. The Secretary of Defense has released the fact that we can support CAPs over sixteen cities very rapidly.

### **You flew ADF missions during the Cold War. How do those missions compare with missions related to Noble Eagle?**

In the latter days of the Cold War, we were concerned with the transit of Soviet bombers down to Cuba. We intercepted those flights off the coast of Iceland and progressively handed them off to the Canadians, who would hand them off to the northern tier of east coast fighters in the United States, who would hand them off all the way down from Florida to about halfway to Cuba.

The real significance between that mission and the mission we are flying now is not the mechanics of our defense but the nature of the enemy. In the Cold War, we had an enemy who

could be deterred and a capability to defend against it. Today, we have an enemy who cannot be deterred although we still have a capability to defend against it. Because of the asymmetric nature of the threat, determining when, where, and how it will attack is much more difficult than it was during the Cold War. We have understood since 1997 that a nondeterable asymmetric enemy is the biggest threat to the continental United States.

We recognized the potential for that attack to come from outside the United States using cruise missiles from ships or barges or light aircraft. But we did not honestly think about hijacked airliners being used in suicide attacks. I don't think we underestimated the capability of terrorist threats. We underestimated the tenacity of the terrorists. To put people in this country in 1996 and have them stay here and train for a one-way suicide mission is not something most people could have comprehended.



### **How has NORAD coverage expanded to include the interior United States?**

We have been working with the FAA to give our own radar the same internal look as the FAA radar. Joint surveillance sites were created through an agreement between the DoD and the Department of Transportation to give our long-range radar better coverage. Then we worked the terminal radars, which will give us very good coverage at lower altitudes.

We need to see what the FAA radar can see because the FAA is the most likely agency to let us know that an attack is in progress from within the country. It will be the most likely agency to know that an airplane is not squawking, is off its

flight plan, and is in airspace where it should not be. To that end, the FAA and the Air Force have spent a lot of money hooking up these radars as we go forward. We also have to be able to communicate with the FAA and with fighters within the central part of the United States. We have developed backup capability very rapidly with a telephone patch through the FAA to any aircraft flying in the United States. If we know where that aircraft is flying and what control center is working with it, we call the FAA to patch us to the cockpit of that aircraft. For a while that was the only capability we had. Now it's a backup capability.

We sent air battle managers, weapon controllers who work at ground control intercept sites, to fifteen of the air traffic control centers where we have poor coverage. The air battle managers can transmit military orders to pilots. We have computerized battle management systems called the Q-93 at our three Continental US sectors within NORAD that were installed in 1983. So you can imagine, given where we are with computers today, that these systems are limited. They can't readily accommodate information from radar sites from within the United States. So our three sectors are using a contingency system to hook up to the internal FAA radars. We took that first step very rapidly. The second step is a long-term solution. We think we will be under contract for a new system in the spring of 2002.

### **How do alert units across the United States handle the increased commitment?**

It's rough on all of our units whether or not they had jets on alert. We have more aircraft on alert



status at our traditional alert sites than even before. We've had no complaints whatsoever from any unit for any reason. At some point, they will get relief so they can do continuation training. When units deploy to Operations Northern or Southern Watch, they are at their best the day they arrive. And at their worst the day they leave. When a unit completes a ninety-day commitment, it has gotten very little training. We are in the same position with Operation Noble Eagle. Sitting alert or flying CAPs takes time away from training. We have been working with Air Combat Command and with the National Guard Bureau to find ways to spread the hurt. We've been able to do that to some degree. We're using part of the Aerospace Expeditionary Forces to relieve those units supporting the New York City and Washington, DC, CAPs. This frees the units for more continuation training.

**What does it mean for units that are not traditional air defense units to suddenly have an alert commitment?**

Most of the units don't have alert facilities. They need shelters, especially in the northern states. We have let contracts to build shelters across the country. In some cases, we are rehabbing old shelters built for the Cold War. We can solve the lack of crew quarters in many different ways. Some units have rented Winebagos. We've installed scramble circuits that connect us to the command post of the units, to departure control, and to the center. Andrews AFB is using a double-wide trailer as an alert facility. The DC Guard, which has been pulling alert duties for quite a while, built alert facilities for its crews, including facilities for female crewmembers and maintenance personnel. We plan to use what has been done in DC as a template for other units with a

new alert commitment.



### **How will the mission change in the coming months?**

Imagine being on orbit over a location in the United States, having an unknown aircraft at low altitude, and getting down to that aircraft

through the FAA. Traditionally, we would have had to make a dozen frequency changes to be able to step down through that system. This isn't a problem if a pilot is dealing with a known hijacked aircraft. But in many cases, we are dealing with unconfirmed threats. We have to go from being on a CAP, to flying down through the system, to intercepting a suspect aircraft that may be flying in a TFR [temporary flight restriction] area. Our close working relationship with the FAA has made this possible. We have FAA representatives at all of our sectors, on all shifts, for twenty-four hours a day. They can talk immediately with all the levels. We have people working with them here as well. We have always had military people working at the FAA at the federal level. Our relationship with every agency and every service we've dealt with has been superb.

One of the most difficult problems we've had is the ability to provide enough early airborne warning aircraft. Our AWACS have been overtasked. The Navy and the Customs Service have provided invaluable support in the form of Navy E-2 Hawkeyes and Customs dome-topped P-3 Orions.



**How will the Air National Guard deal with a sustained commitment, say a year or longer, to these extended or**

## **expanded mission requirements?**

The commitment is to the Air Force. Sure we have more Guard units involved in Noble Eagle because Guard units are located in almost every state across the country. Most active-duty Air Force units are also involved in this mission. People tend to think of air defense as a Guard mission. Look at a map of the northeastern states. You have to get to Virginia before you get to an active-duty unit that operates fighters. Most active-duty fighter units are in the southern United States. You have to go out West to Mountain Home in Idaho before you find a fighter unit in the northern part of the country. That's why the ANG is so heavily involved in Noble Eagle.

The commitment drives resources. We are stressed to do all the things we are tasked to do. We can meet all the commitments, but at a sacrifice to training. Fighter units that continue to have this tasking need to be properly resourced with the number of aircraft to perform the mission and to meet their other commitments. Every single unit in the 1st Air Force before 11 September was involved in the Aerospace Expeditionary Forces. The units had been involved in Operations Northern Watch and Southern Watch. They have been deployed to Panama, Curacao, and Iceland. Our F-15 units were dedicated NORAD fighters. But all three of those units have been to Iceland or to Operations Northern Watch and Southern Watch. We don't want a new air defense command. We want an air force that can perform the sum total of missions that the air force is tasked to perform. I think additional resources will be required to do that.

## **Does a sustained commitment imply new hardware**

## requirements?

Both the F-15 and the F-16 are superb for the air defense role. Our F-16s have VHF and UHF radios. Civilian aircraft are most likely to have a VHF radio. So we need VHF radios in all our aircraft. I don't think we need to build airplanes specifically for this mission. We should have enough airplanes to perform this mission as well as meet our commitments for Northern Watch, Southern Watch, and Enduring Freedom and cover any other contingency. Sharing the load, spreading Noble Eagle missions over the entire Air Force, will make the tasking more sustainable.



## Are there any misconceptions about the mission?

As we get further away from 11 September, people may lose sight of the rigor needed to perform this mission. In December, we passed the 10,000-sortie point. We have done that in bad weather, twenty-four hours a day. Our people have done an extraordinary job sustaining this mission and supervising, flying, and maintaining those airplanes, tankers, and other support aircraft. I think this level of effort is sometimes lost on people not directly involved in it.

Those who live in New York City or have visited ground zero and even the guys who fly over the top of it will tell you that you cannot begin to comprehend the damage through photos or television coverage. Anyone who has visited the damage will not lose sight of it. Nor do I think the people in the Pentagon who can see the big hole in the side of the building will ever forget.

**Do you still have time to fly yourself?**

Yes, but I haven't flown in a Noble Eagle CAP mission because they would take me too far from the base. Still, I plan to fly the mission. I want to fly a CAP mission over New York City in particular.

