# Operational History of the 552<sup>d</sup> Air Control Wing 1955-2000

 $552^{\rm d}$  Air Control Wing History Office MSgt Kenneth K. LaFayette and J. Scott Newberry

### 552<sup>d</sup> Airborne Early Warning and Control Wing

Airborne early warning and control operations commenced with the establishment of Air Defense Command (ADC) in early 1950. Airborne systems provided seaward extensions to land-based early warning radar and assisted in controlling friendly interceptor aircraft. The 552<sup>d</sup> Airborne Early Warning and Control Wing (AEW&CW) adopted these roles when it activated as a provisional wing, on 8 July 1955 at McClellan AFB, California. Initially, ADC assigned the 552 AEW&CW to the 8<sup>th</sup> Air Division (AD). At that time, 552 AEW&CW flying squadrons included the 963<sup>d</sup> and 964<sup>th</sup> Airborne Early Warning and Control Squadrons (AEW&CS). Exactly one month later, on 8 August 1955, the 965 AEW&CS joined the wing. Training occupied the 552<sup>d</sup> Airborne Early Warning and Control Wing's first months until mid-March 1956, when the 552 AEW&CW became an operational part of the ADC's radar network.



Operational command and control over the 552 AEW&CW transferred to the Western Air Defense Force in July 1957 and changed again in July 1960 to the 28<sup>th</sup> Air Division. In the interim (late 1958), the mission had expanded to include "gap-filler" duty when ground-based radar stations became temporarily inoperative. By then, the 552 AEW&CW also supported US space activities. The 552<sup>d</sup> Airborne Early Warning and Control Wing aircraft, aircrews, and support personnel regularly deployed to remote areas of the Pacific region to track ballistic missiles and aid recovery aircraft by pinpointing missile impacts. Later, the 552 AEW&CW provided similar support for the Discovery and Mercury series space missions. In addition, the 552 AEW&CW aircraft vectored US Navy units to the first recovery of an orbiting earth satellite (Discoverer XIII) on 11 August 1960. Later, 552 AEW&CW TC-121D aircraft vectored and controlled Air Force C-119s, which recovered Discoverer XIV's capsule in the air.

The 552<sup>d</sup> Airborne Early Warning and Control Wing soon grew to four flying squadrons with the 1 May 1963 assignment of the 966 AEW&CS. Beginning in April 1965, the 552 AEW&CW kept part of its resources deployed in Southeast Asia as part of the "Big Eye Task Force" (later dubbed "College Eye Task Force"). Nearly every member of the 552 AEW&CW served one or more tours of duty, on a rotational basis, with that force. The task force vectored and controlled friendly aircraft and provided airborne early warning services to allied aircraft throughout the war. By late 1968, the task force had become a 552 AEW&CW formal detachment.



Figure 6 - An interior shot of the aircrew at work inside an EC-121.

The College Eye Task Force continued operations and flew missions from at least eight different locations during the war. Flying EC-121Ds and EC-121Ts (the Ds were manually controlled and the T-models partly "computerized," a transition step between the 121 and the E-3), the task force flew combat operations until August of 1973 when 552 AEW&CW flew its last active combat mission. It stayed in Southeast Asia 10 more months before inactivating on 30 June 1974.

It took nearly 300 temporary duty (TDY) aircrew and maintenance personnel to

keep College Eye going. All 552 AEW&CW personnel performed 60-90 day TDYs from their home station of McClellan AFB, California, with each member averaging one TDY per year. Only three staff positions (two at Tainan AB, Taiwan and one at Kwang Ju AB, Republic of Korea) were not supported by TDYs. The 552 AEW&CW personnel on TDY rotations performed all other operational, maintenance and staff positions for College Eye.

By the end of American involvement in Vietnam, College Eye had produced a proud record of accomplishments. College Eye had controlled over 210,000 aircraft; issued 700 MIG warnings; flown 4,713 combat missions for 48,954.3 combat hours; and perhaps most importantly, assisted in the recovery of 80 downed US aircrew members.

In April 1967, Fourth Air Force assumed command and control over the 552<sup>d</sup> Airborne Early Warning and Control Wing. In November of 1969, the 552 AEW&CW again realigned, this time under Aerospace Defense Command. On New Year's Eve 1969, the Air Force inactivated the 551 AEW&CW, the 552 AEW&CW's sister wing. The 552 AEW&CW transitioned to flying warning and control routes along the eastern seaboard of the United States and Iceland.



Figure 7 - An aerial picture of the College Eye facilities at Korat Royal Thai Air Force Base.

### 552<sup>d</sup> Airborne Warning and Control Group

On 1 July 1974, the Air Force redesignated the 552<sup>d</sup> Airborne Early Warning and Control Wing as the 552<sup>d</sup> Airborne Warning and Control Group. Then, in line with the Air Force's plan to relocate the airborne warning and control mission to another, more centrally located base, reductions soon hit the unit. By mid-1975, these cutbacks had limited the 552<sup>d</sup> Airborne Warning and Control Group to one flying squadron, a training squadron, a maintenance squadron, and a single detachment. From then until 30 April 1976, the unit operated on a vastly reduced scale. The 552<sup>d</sup> Airborne Warning and Control Group and the 963 Airborne Warning and Control Squadron ended their transformation with their inactivation 30 April 1976.

# 552<sup>d</sup> Airborne Warning and Control Wing

On 5 May 1976, the inactivation lasted less than a week however, as the Air Force again activated the unit and redesignated it as the 552<sup>d</sup> Airborne Warning and Control Wing (AWACW). On 1 July 1976, the 552 AWACW relocated to Tinker AFB, Oklahoma. The 552 AWACW reported directly to Headquarters, Tactical Air Command (TAC). In addition, on 1 July 1976, TAC activated three squadrons (the 963<sup>d</sup> Airborne Warning and Control Squadron [AWACS], 966<sup>th</sup> Airborne Warning and Control Training Squadron, and the 552<sup>d</sup> Consolidated Aircraft Maintenance Squadron) and assigned them under the 552 AWACW. On 1 October 1976, the 7<sup>th</sup> Airborne Command and Control Squadron (7 ACCS), stationed at Keesler AFB, Mississippi, began reporting to the 552 AWACW.

Taking on a worldwide commitment, the 552<sup>d</sup> Airborne Warning and Control Wing initiated E-3 Airborne Warning and Control Systems (AWACS) operations in early 1977. On 1 July 1977, the 552 AWACW further expanded when TAC redesignated and activated the 964 AWACS. On 1 January 1978, six months later, the 8<sup>th</sup> Tactical Deployment Control Squadron (TDCS) joined the 552 AWACW, and on 1 July 1978, the 965 AWACS reappeared as part of the 552<sup>d</sup> Airborne Warning and Control Wing. In the Fall of 1978, internal organizational realignment highlighted activities with the inactivation of the 552 CAMS and the activation of the 552<sup>d</sup> Component Repair Squadron (CRS) and the 552<sup>d</sup> Aircraft Generation Squadron (AGS).

In early 1979, the 552<sup>d</sup> Airborne Warning and Control Wing assumed a readiness role in support of North American Aerospace Defense Command (NORAD). The 552 AWACW aircraft and aircrews stood on alert, ready to fly short-notice missions to sectors along the US-Canadian border for airborne radar coverage in defense of the North American continent. On 1 September 1979, organizationally, the 552 AWACW expanded incorporating the 960<sup>th</sup> Airborne Warning and Control Support Squadron, and on 1 October 1979 the 961<sup>st</sup> Airborne Warning and Control Support Squadron. Later in 1982, the USAF redesignated both squadrons



**Figure 8** - A rare photo of the EC-121 and E-3 sharing ramp space at Tinker AFB, Oklahoma.

removing "Support" from their designations.

In October 1979, two E-3 aircraft, 240 aircrew, and support personnel responded to a short-notice deployment to South Korea following the assassination of President Park Chung Hee. The mobility section had the entire deployment package airborne in less than six hours. Over the course of the next two months, E-3 aircraft and aircrews flew 54 missions, totaled 370 flying hours and provided "deep look" surveillance into the Korean peninsula. In addition, during the deployment the E-3 detachment provided extensive joint training for the US and Republic of Korea air defense forces.

From December 1979 through May 1980, another deployment package of two E-3 aircraft, two aircrews, and support personnel accomplished joint training operations in Central Europe and the Mediterranean region supporting the US Navy Sixth Fleet and Allied forces. The training deployment also featured the first E-3 AWACS visit to Egypt.

On 1 July 1980, the 552 AWACW expanded with the realignment of the 41<sup>st</sup> Electronic Control Squadron (ECS). On 1 October 1980, four E-3s and approximately 200 personnel deployed to Saudi Arabia in support of European Liaison Force One (ELF One) operations. The Iran-Iraq War caused concerns in both the United States and Saudi Arabia. They believed that the conflict could "spill-over" into the adjacent Gulf region countries. Planners organized ELF-One to counter this threat and demonstrated American resolve, and the United States sent a symbol of their commitment in the E-3A *Sentry*.

The 552 AWACW supported ELF-One, and continued to provide "around-the-clock" airborne radar coverage during the entire course of the eight-year war. In fact, the E-3's ELF-One obligation did not

officially end until 16 April

1989.



Figure 9 - An EC-130H Compass Call of the 41st Electronic Combat Squadron.

In December 1980, four E-3 aircraft, aircrews, and support personnel deployed to Ramstein Air Base (AB), West Germany, to conduct joint training with elements of the NATO air defense network. This deployment coincided with increased international tension over a possible Warsaw Pact invasion of Poland. Two 552 AWACW

E-3 aircraft, aircrews, and support personnel already on temporary assignment at Keflavik Naval Air Station (NAS), Iceland, while two other E-3 packages traveled from Tinker AFB. By mid-January 1981, the crisis in Poland subsided allowing the E-3 aircraft and aircrews to redeploy back to Iceland and eventually home to Tinker. However, short duration E-3 training flights to the European continent continued thereafter. Later, in October 1981, two 552<sup>d</sup> Airborne Warning and Control Wing E-3 aircraft revisited Egypt following the assassination of President Anwar el-Sadat.

In August 1983, the 552 AWACW sent a single support package to Sudan to provide airborne radar coverage in that nation as it repelled rebel forces near Khartoum. That same year, 552 AWACW activities increased in the Pacific theater following the Soviet military air forces downing of a Korean Airlines, Flight 007. From 1 to 15 September 1983, the 552<sup>d</sup> supported the salvage operation and earned an Air Force Outstanding Unit Award (AFOUA) in the process.

# 552<sup>d</sup> Airborne Warning and Control Division

On 1 October 1983, the 552 AWACW's missions and composition expanded so dramatically that the Air Force elevated the unit to division status and redesignating it as the 552<sup>d</sup> Airborne Warning and Control Division. On 1 November 1983, the 552<sup>d</sup> Airborne Warning and Control Division continued to grow as it took on the 4552<sup>d</sup> Tactical Training Squadron (TTS) (inactivated two months later and redesignated as the 552 TTS on 1 January 1984).

### 552<sup>d</sup> Airborne Warning and Control Wing (Encore)

On 1 April 1985, TAC again redesignated the 552<sup>d</sup> Airborne Warning and Control Division and returned it to Wing status. At the same time, TAC activated the 28<sup>th</sup> Air Division at Tinker AFB to assume intermediate administrative and command and control functions over the 552 AWACW. In conjunction, Headquarters TAC immediately transferred the 7 ACCS, 41 ECS, 960, and 961 AWACS to the 28 AD. On 1



**Figure 10** - An 8 TDCS aircraft, 55-3118 (*The City of Renton*) rests on the ground at Tinker AFB, Oklahoma.

March 1986, the 8 TDCS followed suit and transferred under the 28<sup>th</sup> AD. From August through November 1986, the 3d Airborne Command and Control Squadron also provided short-lived growth to the 552 AWACW's unit strength.

#### The End of ELF-One/JUST CAUSE

On 16 April 1989, the 552 AWACW ended its eight-year deployment to Saudi Arabia, having flown more than 6,000 sorties and 87,000 hours in support of ELF-One. In August 1989, the 552 AWACW again expanded its mission, becoming involved in the war against drugs. Under higher headquarters' direction, the wing began patrolling the southern border of the United States and beyond. On 20 December 1989, Operation JUST CAUSE highlighted the early anti-drug campaign and featured 552<sup>d</sup> Airborne Warning and Control Wing participation in the invasion of Panama and capture of Manuel Antonio Noriega. In February 1990, following JUST CAUSE, the 552 AWACW E-3s began flying routine counter narcotics operations out of Roosevelt Roads NAS, Puerto Rico.

#### DESERT SHIELD/DESERT STORM

On 10 August 1990, the 552<sup>d</sup> Airborne Warning and Control Wing began its deployment to the Persian Gulf in support of Operation DESERT SHIELD. On 16 January 1991, E-3 support packages of the 552 AWACW executed airborne control over several of the initial strikes on Iraq in Operation DESERT STORM. Beginning on 17 January 1991, aircrews of the 552<sup>d</sup> Airborne Warning and Control Wing flew as part of operation PROVEN FORCE in the Persian Gulf War. The E-3 aircraft and aircrews flew a total of **7**, **314.7** combat hours during DESERT STORM, sustaining a **91.36** percent mission capable rate. They controlled **31,924** strike sorties and losing a single Allied aircraft in air-to-air action. In addition, E-3s controlled **20,401** air refueling sorties with tankers off-loading more than 178 million gallons of fuel to **60,543** receivers.

### 552<sup>d</sup> Air Control Wing

In October 1991, Tactical Air Command once more redesignated the 552<sup>d</sup> Airborne Warning and Control Wing, this time naming it the 552<sup>d</sup> Air Control Wing (ACW). On 1 November 1991, TAC redesignated

the 552 Tactical Training Squadron (TTS) as the 552<sup>d</sup> Training Squadron. Then, on 28 May 1992, TAC assigned the 3d Combat Communications Group (CCG) to the 552 ACW. On the following day, 29 May 1992, TAC inactivated the 28 AD and the 552 ACW realigned directly under TAC. In addition on 29 May 1992, the internal composition of the 552<sup>d</sup> Air Control Wing changed with the inactivation of the 552 EMS and the 552 CRS. In turn, TAC activated the 552<sup>d</sup> Operations Group (OG), 552<sup>d</sup> Logistics Group (LG), and 552<sup>d</sup> Computer Systems Group (CSG). The 552<sup>d</sup> Aircraft Generation Squadron (later redesignated 552<sup>d</sup> Maintenance Squadron) remained intact under the 552 LG. (The 552 MS absorbed the remnants of the EMS and CRS.) The 963<sup>d</sup>, 964<sup>th</sup>, 965<sup>th</sup>, Airborne Warning and Control Squadrons and 966<sup>th</sup> Airborne Warning and Control Training Squadron remained active under the 552 OG. On 1 June 1992, the 552 ACW Wing migrated from assignment under TAC to the newly activated Air Combat Command (ACC). On 1 October 1992, HQ ACC's final act of reorganization placed the 552 ACW under the intermediate command of Second Air Force.



**Figure 11** - A member of the 964<sup>th</sup> mans his terminal.

In 1993, the 552 ACW continued its worldwide force projection mission. The 552 ACW maintained E-3 support packages in Southwest Asia in support of Operations PROVIDE COMFORT and SOUTHERN WATCH, and deployed E-3s for the air-interdiction war on drugs coming out of South America. On 1 July 1993, the 552 ACW ended its short tenure with Second Air Force and came under the auspices of Twelfth Air Force. On 17 July 1993, the 7 ACCS EC-130E *Airborne Battlefield Command and Control Center* (ABCCC) aircraft and aircrews served in Operation DENY FLIGHT at Aviano AB, Italy. United Nations operation DENY FLIGHT sought to facilitate the end of the civil war between the Croatians and the Serbians in the former Yugoslavia. On 8 October 1993, a final wing reorganization move occurred when ACC activated the 34<sup>th</sup> Combat Communications Squadron.

The fall of the Soviet empire led to improved relations between Eastern Europe and the United States. On 15 March 1994, in light of the advances in this area, the 552<sup>d</sup> Air Control Wing hosted two key members of the Polish military. The 552 ACW provided the Polish visitors a tour of the E-3 aircraft and detailed briefings on the E-3 AWACS aircraft capabilities.

In March 1994, another history-making event occurred in the 552 ACW when the 175<sup>th</sup> Fighter Wing, Maryland Air National Guard chose First Lieutenant Julie E. Petrina as the first female A-10 pilot. She performed as the executive officer for the 552<sup>d</sup> Computer Systems Group.

In April of 1994, many events occurred that would impact the organization of the 552<sup>d</sup> Air Control Wing and the business of airborne command and control. On 1 April 1994, in accordance with the

USAF's reorganization and restructuring system, the 3 CCG became a direct reporting unit under Twelfth Air Force. Their short tenure with the 552 ACW lasted barely 23 months.

#### Blackhawk Helicopter Shootdown

On 14 April 1994, another significant event occurred. Two USAF F-15s controlled by a 552 ACW E-3 aircraft and aircrew accidentally shot down two US Army "*Blackhawk*" helicopters while they passed through the northern Iraq "no-fly zone." The F-15s had mistaken the two aircraft for Soviet built "*HIND*" helicopters. This "friendly fire" incident led to the deaths of 26 people and galvanized national interest in E-3 activities. This unfortunate accident also provided the genesis for a massive recertification process for all 1,300 airborne warning and control aircrew members.

On 1 July 1994, Headquarters ACC directed the 963<sup>d</sup>, 964<sup>th</sup>, 965<sup>th</sup> Airborne Warning and Control Squadrons and 966<sup>th</sup> Airborne Warning and Control Training Squadron all be redesignated as Airborne Air Control Squadrons (AACS). On the same day ACC also redesignated the 8 ADCS as the 8<sup>th</sup> Airborne Command and Control Squadron (ACCS).

#### UPHOLD/MAINTAIN DEMOCRACY - VIGILANT WARRIOR

The autumn of 1994, proved a turbulent time for the 552<sup>d</sup> Air Control Wing. During September and October, the 552 ACW found itself involved in two real world contingencies, Operations UPHOLD/MAINTAIN DEMOCRACY and VIGILANT WARRIOR. The United States, along with several Caribbean nations, banded together to conduct UPHOLD DEMOCRACY. UPHOLD DEMOCRACY resulted in the invasion of the island nation of Haiti to restore its duly elected elected president Jean-Bertrand Aristide into power. VIGILANT WARRIOR occurred when Iraq once again tried to flex its military muscles and threatened Kuwait. Luckily, both events ended quickly and quietly. In UPHOLD DEMOCRACY former President Jimmy Carter led a delegation to peacefully defuse the Haitian situation and broker a peaceful US military landing. VIGILANT WARRIOR displayed to the Iraqi leaders that the US and the coalition still planned to defend their interests in Southwest Asia. After this delay Iraq thought better of their military aggression and pulled Iraqi troops back from the Emirate. Thus, Iraq avoided another armed conflict with the US the Gulf State and coalition allies.

The 552<sup>d</sup> provided missions for SOUTHERN WATCH flying out of Riyadh, Saudi Arabia, and then patrolling the skies over southern Iraq, monitoring aircraft movements within that country. On 18 September 1994, 552 ACW members flew their 2,000<sup>th</sup> sortie in support of Operation SOUTHERN WATCH aboard tail number 79-0001.

#### **Oklahoma City Bombing**

The 552<sup>d</sup> Air Control Wing had an exciting year peppered with tribulation in 1995. A shocking act of treachery struck the local Oklahoma City community and cast a shadow over the 552<sup>d</sup> as well. Terrorists concealed a bomb in a rental truck just outside the Alfred P. Murrah Federal Office Building, in downtown Oklahoma City. At 0902 on Wednesday, 19 April 1995, the bomb exploded, killing 168 people and wounding hundreds of others. Witnesses stated that they felt the impact tremors from the bomb up to 30 miles away; the emotional tremors continue even today. National media compared the scenes at the Murrah Building to those viewed in devastated Beirut and the post apocalyptic scenes that followed the first bombing of the World Trade Center in New York. The bomb blast shook not only the inhabitants of Oklahoma City, but also the entire United States.

#### **Aircrew Recertification**

An emphasis on training carried over from the 1994 Aircrew Recertification directly related to the "*Blackhawk*" shoot down. Reorganization and expansion again affected the 552 ACW when Headquarters ACC activated the 952<sup>d</sup> Aircraft Generation Squadron (Test) and inactivated the 552<sup>d</sup> Maintenance Squadron. This ended a four-year experiment on the effectiveness of a combined maintenance organization. Headquarters Air Force approved the creation of the 970<sup>th</sup> Airborne Air Control Squadron, an Air Force Reserve AWACS unit. Simultaneously, Air Force authorized an increase from 28 to 40 AWACS aircrews. Both of these actions sought to decrease the amount of time each crewmember spent on temporary duty each year, and to increase his/her overall quality of life. In addition, the 552 ACW continued support of Operations PROVIDE COMFORT, SOUTHERN WATCH, and DENY FLIGHT.

The 552<sup>d</sup> Air Control Wing's Operational Readiness Inspection (ORI), Phases I and II, received very positive results. The 552 ACW Inspections and Exercises branch's (CVI) preparation for the ORI consisted of two Sentry Leap exercises and three Sentry Learn exercises. The 552 ACW CVI section adopted the benchmarking process to help the 552ACW prepare for the inspection. Benchmarking involved the wing inspectors observing ACC Inspector General Team ORIs at their bases. In turn, other wings would then observe our inspection to learn how to prepare. This method obviously worked rather well as the 552 ACW earned Excellent ratings in both the Phase I inspection in March 1995, and Phase II inspection in July 1995.

#### The Yukla 27 Tragedy

On 22 September 1995, tragedy once again struck the AWACS community. An E-3 AWACS aircraft, tail number 77-0354, call sign Yukla 27 crashed at Elmendorf AFB, Alaska, minutes after takeoff. The crash resulted in the deaths of twenty-two Air Force and two Canadian Air Force aircrew members stunning the members of the AWACS community. A flock of Canadian geese caused foreign object damage to the E-3 bringing about the crash. The catastrophic event marked the first loss of an US Air Force AWACS aircraft to accident or enemy action. The term "Yukla" has its origins in Alaskan dialect meaning "Eagle." All 962<sup>d</sup> Airborne Air Control Squadron flights carry this call sign.

#### **Block 30-35 Upgrade**

On 4 October 1995, the first E-3 AWACS aircraft (tailnumber 80-0137) equipped with the Block 30/35 upgrades arrived at the 552<sup>d</sup> Air Control Wing. At a cost of approximately \$984 million for the entire E-3 fleet, the upgrades represented the single largest modification ever made to the E-3 AWACS aircraft. Block 30/35 affected four major subsystems aboard the E-3 aircraft including integration of Joint **Tactical Information Distribution** Systems, Global Position System, **Electronic Support Measures** 



Figure 13 - An E-3 on a surveillance mission.

System, and Data Analysis Programming Group. All E-3 AWACS received these modifications.

At the end of 1995, the wing discovered that HQ ACC had awarded Brigadier General Silas R. Johnson, Jr., the annual Moller Trophy, which recognized the best wing commander in the command. The award represented the best qualities of command, ". . . most effective personal leadership to achieve and maintain a wing's combat effectiveness." General Johnson stated that "A piece of this trophy belongs to each and every member of the 552 ACW—every officer, airman and civilian who performed our mission has earned this." In conjunction with the Moller Trophy, the 552 ACW earned its fifteenth consecutive Air Force Outstanding Unit Award, one of only six units in the command to earn the honor.

#### The Brothers to the Rescue

On 24 February 1996, the 552 ACW flew in support of national interests when it flew watch over a group of US citizens staging a protest against the government of Cuba. Earlier in the year, the Cuban Air Force had shot down two civilian planes belonging to the organization known as "Brothers to the Rescue," when they allegedly trespassed upon Cuban airspace. To protest the shoot down, Brothers to the Rescue organized a flotilla of small boats to drift outside the international limits of Cuba and to perform a memorial service, bringing attention to the tragedy. The US Atlantic Command, seeking to prevent further bloodshed, monitored the flotilla to ensure that the protest would be peaceful and safe. Atlantic Command concluded that the best resource for this purpose would be the E-3. On 24 February 1996, the well-publicized protest occurred without incident.

The remainder of 1996 proved to be challenging, rewarding and tumultuous for the 552<sup>d</sup> Air Control Wing. Early in the year, Headquarters ACC selected the 552 ACW as the annual recipient of the command's Annual Ground Safety Award for 1995. From 15-20 April 1996, HQ ACC sponsored evaluation of the 552 ACW's Standardization and Evaluation Division (Stan/Eval). This centerpiece of the 552 ACW's training effort proved well up to the task and gained a rating of Excellent from the evaluation team. Shortly thereafter, hardly without time to catch its collective breath, HQ ACC followed up the Stan/Eval inspection with a much broader scoped Quality Air Force Assessment (QAFA). From 22-26 April 1996, the wing played host to a multitude of evaluators that descended upon Tinker AFB to analyze how the 552 ACW performed its everyday mission and duties. As in past inspections, the 552 ACW personnel proved more than merely adequate to the task and earned an overall rating of Excellent.

# Inactivation of the 552<sup>d</sup> Maintenance Squadron

Later in 1996, more reorganizations and inactivations affected the wing structure. On 1 May 1996, the 552<sup>d</sup> Maintenance Squadron (MXS) inactivated and gave way to two old friends. Finding the size of the combined maintenance structure unwieldy and cumbersome, the 552 MXS split its personnel and resources into two squadrons that had been inactivated four years before. The 552<sup>d</sup> Component Repair Squadron and the 552<sup>d</sup> Equipment Maintenance Squadron again prowled the tarmac at Tinker AFB. Major Merkel C. Joseph and Major James R. Watts took command of each squadron, respectively. Then on 15 May 1996, the Wing bid farewell to the unique 8<sup>th</sup> Airborne Air Control Squadron. The squadron's personnel were absorbed by the 552 ACW or transferred to other bases, and the aircraft found homes with other units.

# Activation of the 513th Air Control Group

Another activation also took place during the summer of 1996 that would have a significant impact on the 552 ACW's ability to support its mission and improve the quality of life for the members of the 552 ACW. On 13 July 1996, the Air Force Reserve activated the 513<sup>th</sup> Air Control Group (ACG). The 552 ACW looked at the 513 ACG to reduce the number of temporary duty days that the members of the 552ACW endured each year. The 513ACG's mission would parallel that of the 552 ACW "providing airborne warning and control system support of combat as well as contingency and special missions worldwide." In this symbiotic relationship, the 552 ACW would maintain actual "ownership" of the E-3 aircraft but would benefit from the reservists assisting in the maintenance of the aircraft and flying actual missions with the E-3s.

Finally, at the end of a busy summer, Headquarters USAF named SrA Gregory White, a surveillance technician for the 963 AACS, as the Air Force Outstanding Aircrew Member of the Year for 1996. A portion of SrA White's award citation read that his "outstanding tracking abilities resulted in perfect test results of radar correlation between F-15, F-16, F-4 fighter and US and British E-3 aircraft during electronic tests at Mountain Home Air Force Base, Idaho, and Nellis AFB, Nev. [sic]." SrA White's supervisor, SSgt Terry Patterson, called White "a proven performer and resident technical expert at his craft."

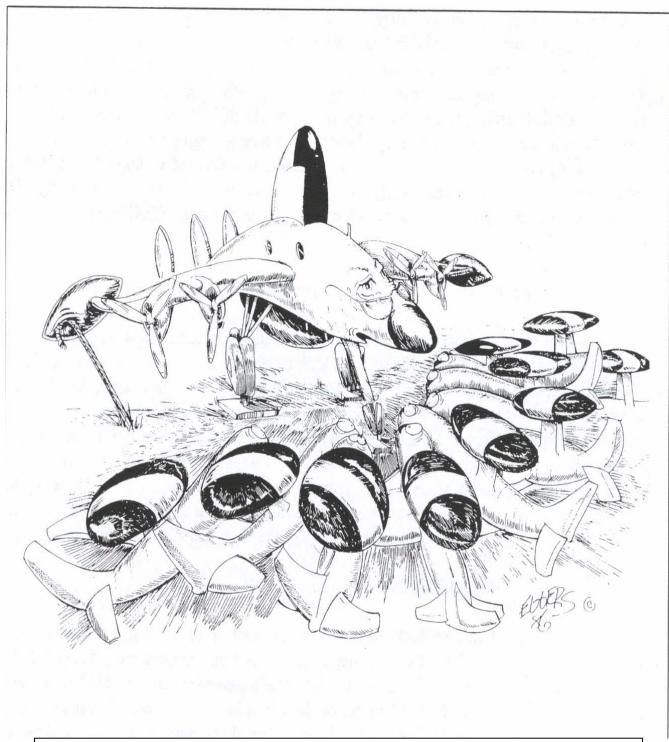
#### **Isochronal Conversion**

In August 1996, the 552<sup>d</sup> Air Control Wing streamlined its aircraft inspection process. This new concept named Isochronal Conversion eliminated the 230 hour interval phase inspections and implemented a six month or 460 flying hour aircraft inspection schedule. Maintenance personnel did not inspect the one remaining E-3 aircraft due to its scheduled depot maintenance.

#### The 20th Anniversary of the E-3

On 23 March 1997, the E-3 Airborne Warning and Control System aircraft celebrated its 20<sup>th</sup> Anniversary of service to the United States and the United States Air Force. Originally conceived to overcome the line-of-sight limitations of ground based radar systems, the E-3 development program produced the preeminent airborne warning and control system in the world. Two decades ago, after nearly 14 years of development, a modified Boeing 707-320B E-3A aircraft (tail number 50557), with a strange looking circular, spinning, 30 foot "Frisbee" just aft of its mid-point, touched down on the tarmac at Tinker AFB, Oklahoma. Its arrival heralded a new philosophy in airborne combat and forever changed the concept of airborne battle management.

# Generations



**Figure 14** - There I was......trying to land at Da Nang on one engine, low on fuel, one wing on fire.....THEN the mortar attack began!!!!!

#### Mission Simulator Live Intercept Training Environment

On 27 September 1996, the Air Combat Command Commander, General Richard E. Hawley, requested an outline for "…operational requirements to enhance E-3 mission simulators." ACC assisted the 552<sup>d</sup> Air Control Wing in upgrading the simulators, eventually evolving into the Mission Simulator Live Intercept Training Environment (MS LITE). The updated simulators provided additional training opportunities for weapon directors, increased continuation training opportunities, and accelerated weapons directors" "time to experience."

The MS LITE design fed the remote live radar picture from the Southeast Air Defense Sector into the AWACS mission simulators, allowing crewmembers the ability to control airborne aircraft, while working in a ground environment. An additional Advanced Distributed Simulation (ADS) upgrade allowed AWACS personnel to emulate an integrated theater air control battle environment. These enhancements provided aircrews real world training and interaction with actual fighter units. The MS LITE's state of the art design reduced operating costs and additional wear on E-3 aircraft. Mission Simulator Live Intercept Training Environment achieved Initial Operational Capability on 17 December 1997.

#### Lieutenant Colonel John J. Kennedy, Jr., makes Air Force History

On 15 January 1997, Lieutenant Colonel John J. Kennedy, Jr., became the first non-rated officer to take command of an Air Force operational flying squadron, the 963 AACS. He also became the first non-rated operational commander of the 552 OG.

#### **Aircrew Career Field Changes**

On 28 February 1997, AWACS technicians received two newly developed Career Field Education and Training Plans (CFEPT). The CFEPTs were related to the realignment of four Air Force Specialties (AFS) directed in 1993 by then Air Force Chief of Staff, General Merril McPeak. Airborne Radar Technicians, formerly AFSC 118X0, and Computer Display Maintenance Technicians, formerly AFSC 118X2, combined to become Airborne Mission Systems Specialists, 1A5X1. The Communications Systems Officer, formerly AFSC 116X0, and Communications Technician, formerly AFSC 118X1, combined to become Airborne Communications Specialists, 1A3X1.

# 552<sup>d</sup> Air Control Wing 1997 Operational Readiness Inspection

On 28 April 1997, the 552<sup>d</sup> ACW achieved an Outstanding rating during ACCs Phase I ORI. This landmark achievement signified the highest rating for any wing in ACC History. The spectacular ratings achieved exemplified the 552 ACW personnel's "can do" attitude, they received Outstanding ratings in eleven separate categories.

# The 552<sup>d</sup> Aircraft Generation Squadron comes back to Life

After a 16-month hiatus and awaiting the results of the 952<sup>d</sup> AGS test, the 552<sup>d</sup> AGS again activated. On 1 December 1995, the 952 AGS test activated and on 16 September 1997 inactivated. On 29 May 1992, the 552 AGS redesignated as the 552<sup>d</sup> Maintenance Squadron and officially inactivated on 1 May 1996. At the ceremony on 16 September 1997, the 552 MS again activated and redesignated as the 552 AGS. Major Richard A. Lane took command until 26 November 1997, when Lieutenant Colonel Barbara F. Reynolds replaced him as commander.

### 552<sup>d</sup> Air Control Wing 20<sup>th</sup> Anniversary

On 27-29 June 1997, the 552<sup>d</sup> Air Control Wing observed their 20<sup>th</sup> Anniversary during three days of celebratory events. Former commanders and other senior leadership returned to commemorate this special reunion. The 552 ACW's first commander, General John L. "Pete" Piotrowski led the festivities. Other dignitaries at the 20<sup>th</sup> Anniversary included Major Generals Neil L. Eddins, Jerry D. Holmes, William K. James, Gary A. Voellger, Silas R. Johnson, Jr., John D. Logeman, Jr., John R. Farrington; Brigadier Generals William J. Ball and David Oakes; and Colonels James R. Sterk, Wylie J. Koiner and John M. Howell.

The festivities began with a Welcome Brunch at the Tinker Air Force Base Enlisted Club. Hosted by the 552 ACW Commander, Brigadier General James W. Morehouse, more than 200 guests were present. Other events that took place included a full day of water-sport activities at Lake Stanley Draper, just south of Tinker AFB. A golf tournament, attended by more than 130 participants, also took place at the base golf course. Tour buses were set up for those members who wanted to see areas of the base that they had not seen for some time.

The 20<sup>th</sup> Anniversary committee organized a special open house for attendees to visit 552 ACW facilities such as the static aircraft display, mission and flight simulators, maintenance facilities, and more. More than 1,000 people attended this event. Senior Airman Donald A. Stanton, Jr., from the 552<sup>d</sup> Equipment Maintenance Squadron, unveiled one the special 20<sup>th</sup> Anniversary E-3 nose art. Later that evening, 700 people attended the 20<sup>th</sup> Anniversary E-3 AWACS Banquet held at the Medallion Hotel in downtown Oklahoma City.

The final day of activities included a farewell luncheon at the Tinker AFB Officers Club hosted by Brigadier General Morehouse. In his remarks, he told the group, "This was indeed a true celebration of pride. Myself, our visitors and all members of Team AWACS thoroughly enjoyed ourselves in celebrating our history. More than that, we gained a greater sense of confidence for our wing and nation's future."

# 552<sup>d</sup> Air Control Wing Join in Gulf Build-up

On 16 February 1998, two E-3s joined three previously rotated E-3s at Prince Sultan Air Base, Saudi Arabia, bringing the total number of E-3s on station to five. The new aircraft allowed the 552 ACW to fly five additional sorties per month. The 552 ACW's proactive leadership and planning actually decreased operations tempo in the region during the three-month deployment. The reduction occurred primarily due to the extra aircrews absorbing the additional sorties.

On 4 June 1998, the two deployed aircraft returned along with more than 120 people assigned to the 552 ACW. This was a result of the reduction in forces directed by President Bill Clinton. The February – June 1998 deployment of the additional E-3s enhanced the capabilities of the forces already in place while substantiating the resolve of the United States and international community to ensure Iraq complied with the United Nations Security Council Resolutions.

#### **Block 30/35 Initial Operational Capability**

On 31 March 1998, the 552 ACW declared initial operational capability for the E-3 Sentry block 30/35 upgrade. The largest upgrade performed on the E-3 since its initial production integrated operators and systems, and improved the E-3's ability to perform its air battle management mission worldwide.

The Block 30/35 modification encompassed four major areas on the aircraft: the Global Positioning System (GPS), computer system upgrade, Electronic Support Measures (ESM) system, and a Joint Tactical Information Distribution System (JTIDS) class 2H terminal. The GPS modification incorporated the positioning system into the navigation and mission crew computers, allowing improved navigational accuracy. It also gave the flight crew excellent flight planning capabilities. The E-3 required an upgraded computer system to support the Block 30/35 modifications on the E-3 and prepared to provide more processing power and additional memory. The modification also made available future system expansion. The ESM system augmented the on-board sensors, detecting signals from hostile, neutral, friendly, and unknown emitters while improving the E-3's combat identification, surveillance and weapons control capability.

The Class 2H Joint Tactical Information Distribution System upgrade further enhanced the E-3 AWACS. The JTIDS is a secure digital communications system used in a combat environment. The JTIDS system allows E-3 crewmembers to communicate with other participants in the air battle such as fighter aircraft, Navy units, and ground-based units with the capability to identify units using common points of reference. The Class 2H JTIDS terminal uses the TADIL J/Link 16 message and provides increased secure voice and data capability for the E-3. These modifications not only enhance the aircrews' ability to do their mission but also ensure the E-3's viability through the year 2025. The 552 ACW continuously searches for more efficient ways to conduct the mission. The E-3 modernization program is doing just that and will keep the E-3 AWACS at the cutting edge of air battle management.



Figure 15 – Nice Cheeks: The new look of the Block 30/35 equipped E-3 AWACS aircraft.

#### 552 ACW supports Allied Force

Our nation's leaders once again called upon the 552 ACW to help support our worldwide community. This time, the 552 ACW deployed on behalf of the mission support of our NATO counterparts in the European theater. The NATO E-3s stationed at Geilenkirchen AB, Germany, routinely patrol led the skies of Europe. However, the escalating conflict in the Balkans required more of the U.S. E-3 airborne battle management platforms. On 29 April 1999, 125 crewmembers and three E-3s deployed to Geilenkirchen AB, in support of Operation ALLIED FORCE. The 552 ACW E-3s flew 47 sorties supporting over 300 aircraft during the 60-day deployment.

On 24 June 1999, approximately 200 military personnel and aircraft redeployed home to Tinker responding to the redeployment order issued by Secretary of Defense, William J. Cohen. This important operation demonstrated AWACS commitment to support the United States decision makers. Similarly, the U.S. is committed to supporting NATO and the NATO led peacekeeping policies worldwide.

# 513<sup>th</sup> Air Control Group members deploy

Roughly a dozen maintenance members from the 513<sup>th</sup> Air Control Group, Air Force Reserve, and an advance team of six more aircrew members departed to relieve active duty counterparts at overseas locations at Prince Sultan AB, Saudi Arabia and Incirlik AB, Turkey. The team prepared for the subsequent arrival of the remainder of 513 ACG contingent. The members traveled to the East Coast and flew on USAF military transport aircraft to their final destinations. On 8 May 1999, the USAF witnessed the activation of more than 200 military members from the 513<sup>th</sup> Air Control Group under the Presidential selected reserve call in support of Joint Chief of Staff taskings outside of the continental U.S. On 10 May 1999, the activated reservists received the call to report to their units for departure.

### May 3<sup>rd</sup> 1999, Tornado

On 3 May 1999, Oklahoma residents including Tinker AFB, and 552 ACW personnel witnessed the most powerful and destructive force in Oklahoma history. Commonly referred to in Oklahoma as the "May 3<sup>rd</sup> Tornados," the twisters touched many lives and affected many communities in Oklahoma and Kansas. The 552 ACW's performance was nothing short of amazing and appreciated by many.

The storm's genesis began in southwestern Oklahoma, near Apache. It gained momentum near Newcastle and headed northeast towards Moore and Oklahoma City. It remained on the ground several hours causing massive destruction. The tornado struck the city of Moore ten miles southwest of Oklahoma City and continued its northeast path toward Tinker AFB. The Tornado smashed into the Tinker AFB gate on Sooner Road just south of the Southeast 29<sup>th</sup> and Sooner Road intersection, causing major damage to dormitories, softball fields, football field, golf course, horse stables, Morale, Welfare, and Recreation warehouses, as well as other structures. The base also sustained moderate damage to its far northwest corner enduring large hail and 300 plus miles per hour winds.

The neighboring communities of Del City and Midwest City saw huge portions of their cities demolished. The May 3<sup>rd</sup> Tornado registered, the strongest wind speeds ever measured on the Fujita scale in Moore, 318 miles-per-hour. Meteorologists assigned the storm a rare F-5 (by contrast, of 1,255 tornadoes in 1998, only five even reached an F-4 classification). Overall damage to the base included the total destruction of eight buildings. Other buildings received some type of damage from flying debris including nine dormitories. The tornado also destroyed a mile of the base's northwest fence line.

The 552<sup>d</sup> Air Control Wing responded to the bases call for assistance by setting up a mobile command post. The 552 ACW sent more than 1,000 members out to the base and local communities to help with the clean up efforts. A total of 1,389 wing personnel were submitted for the Humanitarian award in recognition of their volunteer efforts in the May 3<sup>rd</sup> Tornado. The commander gave kudos to all the members of the 552 ACW for the rapid response and aid given to the local communities affected by the storm.



**Figure 16** – <u>For Sale</u>: A small sample of the destruction caused by the by the F-5 tornado on 3 May 1999.

Even though local television and radio stations provided ample warning and notification to prepare the community for the oncoming storm, complete preparation for disasters of this magnitude are impossible. Damage estimates recorded more than 9,000 homes damaged or destroyed in the greater Oklahoma City metropolitan area, including Del City, Midwest City, Moore and Choctaw.

#### 552 ACW welcomes new commander

On 15 March 2000, the 552<sup>d</sup> Air Control Wing bid farewell to its commander Brigadier General James L. McFann, Jr., after a year and a half of excellent leadership. The USAF reassigned General McFann as the director of plans at the North American Aerospace Defense Command Headquarters at Peterson AFB, Colorado. Brigadier General Ben T. Robinson succeeded General McFann as the 552 ACW commander. General Robinson served as vice commander of Eighth Air Forces at Barksdale AFB, Louisiana, before his return. General Robinson had previously served as the 552<sup>d</sup> Operations Group Commander in 1994 before relocating to Robbins AFB, Georgia when he helped to establish the 93<sup>d</sup> Air Control Wing.

### 552<sup>d</sup> Air Control Wing 2000 Operational Readiness Inspection

On 28 April 2000, the 552 ACW achieved an Outstanding rating during the Air Combat Command Initial Response ORI. This result matched the 1997 benchmark results as the highest ratings in ACC history. Air Combat Command conducted their evaluation in a two-part or dual location ORI unique to the 552 ACW and the mission. Phase I Inspection one took place at Prince Sultan Air Base, Saudi Arabia, with Phase II Inspection occurring at Tinker AFB, Oklahoma. Air Combat Command utilized the new grading criteria utilizing "Combat Ready, Combat Ready with comments, and Not Combat Ready" during the 552 ACW's Phase II Inspection.

