In June, 1955 Lt. Col. Daniel Wolf, the 601st AC&W's Commander, received orders transferring him to the 615th AC&W Sqdn. in Prum, Germany, succeeded at the 601st by Capt. Blaine W. Sweitzer.

Information for 615 ACW Birkenfeld, DE
Call Sign(s): Cornbeef

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<tr>
<th>Perm ID</th>
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<th>JSS ID</th>
<th>Unit</th>
<th>Location</th>
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<th>Oper. Date</th>
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<td>ACW</td>
<td>Birkenfeld, DE</td>
<td>CPS-1; CPS-4; FPS-7E; FPS-6C</td>
<td>HADR</td>
<td>31-Dec-69</td>
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Information for 615 ACW Borfink, DE
Call Sign(s): Waterhole; Barber; Scandalize; Hard Tire

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<td>CPS-1; CPS-4; FPS-7E; FPS-6C</td>
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<td>01-Jan-70</td>
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**LINEAGE**
Inactivated 1 Oct 1986

**STATIONS**
Borfink, Germany
ASSIGNMENTS

COMMANDERS

HONORS
Service Streamers
Campaign Streamers
Armed Forces Expeditionary Streamers
Decorations
EMBLEM
EMBLEM SIGNIFICANCE
MOTTO
NICKNAME

OPERATIONS
412L fixed radar

21 November 1983, the Boerfink CRC received its first operational tasking from SOC III. From then on, the 615th AC&WS was responsible for Boerfink's airspace surveillance, identification, and command and control operations on a 24 hour-a-day basis.

1 October 1986, the 615th AC&WS fixed 412L radar site at Boerfink was officially inactivated. On this date, control and ownership of this site was passed from the 601st TCK to the German Air Force thus ending the wing's involvement with fixed CRP operations since its inception on 1 November 1968.

1 November 1968 The Aircraft Control and Warning Squadron (AC&WS) elements of the 86th Air Division were transferred to the control of the 601st TCW. This transfer brought the 412L fixed NATO air defense system with the 407L mobile air control network under one administrative control. These fixed radar elements were the 606th AC&WS (a reporting post at Doebraberg), the 615th AC&WS (a control and reporting post at Birkenfeld Air Station), and the 616th AC&WS (a control and reporting post at Wasserkuppe).

28 April 1969 The 615th AC&WS was notified that Birkenfeld Air Station would be turned over to the Federal Republic of Germany by 31 December 1969. They were directed to relocate to Baumholder, Germany.

31 Dec 1969 The 615th AC&WS completed its relocation from Birkenfeld to Boerfink
1 October 1986 The 615th AC&WS fixed radar site at Boerfink was inactivated.

1 October 1986 The second phase of the TACS drawdown resulted in the inactivation of the 602nd TCS, 621st TCF, and the 636th TCF effective this date.

At this point in the development of the European TAGS, a parallel situation developed in that the 526th TCG was activated at Spangdahlem AB on 1 November 1953. Its operational component units were the 619th TCS (Toul-Rosiers AB, France), the 604th AC&WS (Freising, Germany), the 615th AC&WS (Pruem, Germany), and the 616th AC&WS (Ulm, Germany). These subordinate units came from several sources. For instance, the 604th AC&WS had originally been Company "D" of the 555th and was assigned to the 501st TCG prior to 15 July 1952. At this time, control of the 604th passed to the 155th TCG prior to being assigned to the 526th TCG in November 1953. Conversely, the 619th TCS was a newly activated unit which took over the personnel and equipment of the just inactivated 121st TCS; an National Guard unit whose main element arrived in Europe on 4 November 1952. In any event, like the 501st TCG, the 526th reported directly to Twelfth Air Force under USAFE.

On 1 July 1955, the 501st and 526th TCGs merged to form the Tactical Control Wing, Provisional. In all, this consolidation process brought a number of elements together to form Twelfth Air Force's tactical control system. These included two tactical control squadrons (the 897th TCS and 619th TCS), six aircraft control and warning squadrons (the 601st AC&WS, 602nd AC&WS, 603rd AC&WS, 604th AC&WS, 615th AC&WS, and 616th AC&WS), and three Shoran Beacon Squadrons (the 3rd, 6th, and 7th Shoran Beacons). The Tactical Control Wing, Provisional, was created as a tentative measure designed to improve the effectiveness of the radar and aircraft control organizations within Twelfth Air Force. After operating as a provisional wing for two years, the unit had ample opportunity to determine the most suitable type of organization for the effective accomplishment of the USAFE tactical control mission. Accordingly, on 18 December 1957, this tentative status was dropped and the unit was designated the 501st Tactical Control Wing. Finally, on 18 November 1960, the 501st TCW merged with the 86th Fighter Interceptor Wing to form the 86th Air Division (Defense). For the next five years the various TAGS elements under the 86th Air Division went through a series of relocations, activations, inactivations and redesignations.

Four months later, on 1 November 1968, several of the Central Region's fixed radar sites came under the wing's control as the 86th Air Division relinquished responsibility for its three subordinate AC&WS squadrons. These fixed elements were the 606th AC&WS (a reporting post at Doebraberg), the 615th AC&WS (a control and reporting post at Birkenfeld Air Station), and the 616th AC&WS (a control and reporting post at Wasserkuppe). This transfer brought together the 412L fixed NATO air defense system with the 407L mobile air control network. Several other significant events also occurred on 1 November 1968 as wing FACPs began converting to the new "two dimensional" TPS-44 radars and several detachments were activated. The newly activated detachments at 3 (Freising) and 6 (Giebelstadt) provided operational assistance at fixed radar sites owned by the German Air Force (GAF). The third detachment activated, Det 4 at Ramstein, was a consolidated field maintenance facility for the USAFE 412L radar system.
On 4 October 1977, the 603rd TCS started an extensive four week training program for the final 13 newly arrived TPS-43E radars. Each unit in the wing practiced setting up their own radar at the 603rd's technical site in Mehlingen. This period proved to be a busy time for the 603rd TCS which, along with the 615th and 616th AC&WS', participated in an E-3A AWACS demonstration in November and December 1977. The purpose of this demonstration, which proved to be very impressive to NATO officials who observed the activity, was to advertise the advanced capabilities of the E-3A to provide improved air surveillance for the European theater and its ability to downlink data through the ground environment system. The 603rd TCS deployed to Gruenstadt from 9 November through 15 December to support this demonstration. In several other TAGS related events during the year, on 14 November 1977, the 626th and 636th TCFs moved off Carl Shurz Kaserne to a location on top of the Bremerhaven City Dump at Muellplatz Grauer Wall, just down the road from their previous site. They would operate here, literally surrounded by garbage, for the next three years. Also, on 1 December 1977, the 636th TCF controlled its first mission, a sortie of two F-111s out of RAF Lakenheath, England. However, like the other two newly activated units, they would not be fully operational for several months.

Several other operational "firsts" also highlighted 1972. The 629th TCF assisted the 636th TCF in its first practice deployment from 4 through 7 January 1978 and the 606th TCS controlled its first practice intercept several weeks later on 2 February. The intercept involved F-15 aircraft from Bitburg AFB. On 22 March 1978, the 606th TCS, 626th TCF, and 636th TCF officially came on line as operational units and were declared fully operationally ready. Their sister radar units in 2 ATAF had previously achieved the same status on 1 February 1977. Also, in another key development, a change of command ceremony was held on 31 December 1978 which passed control and ownership of the Wasserkuppe 412L fixed radar site from the wing to the German Air Force. This concluded the transfer of various 4 ATAF 412L sites to the Germans that had been planned since 1959. On the next day, the 616th AC&WS was officially inactivated. Since the 606th AC&WS was previously inactivated and the Doebraberg site turned over to the GAF on 1 July 1974, only the 615th AC&WS fixed 412L radar site at Boerfink remained assigned to the wing. The remaining five fixed radar sites were now owned and operated by the German Air Force.

The arrival of the 615th AC & W Squadron commenced a decade long buildup of Birkenfeld Air Station and related activities. The Rhein Upper Area Control Center on Erbeskopf was operated by USAF, German Air Force and BFS (German FAA) until 1968 when that operation was transferred to Frankfurt ARTCC.

The 412-L Air Weapons Control System was installed in Borfink Bunker and "Waterhole" became a high profile operation contributing to the 615th's growth into the 17th Air Force's largest AC & W Sq.

Constant training of assigned personnel and allied personnel was the order of the day. The continued updating of the programs by System Programming and Test Site (SPATS) members to insure compatibility with other NATO operated systems was unending.

Allied Sector III, Sector Operations Center briefings to many visiting dignitaries both civilian and military were a part of daily life.
On August 29, 1969, "The American", the base newspaper announced "Birkenfeld to Close!"

Birkenfeld Air Station was turned over to the German Army (Bundeswehr) and was renamed "Oldenburg Kaserne". For the next 10 years it was used as a Bundeswehr facility, then an AFCENT facility in 1979 and a NATO base in 1983, all in support of the Borfink Bunker. Many NATO countries and USAF were assigned there until it was closed in 1994 and returned to the administrative management of the Town of Birkenfeld.


615th
Aircraft Control & Warning Squadron
Prum, Germany
Redesignated: 1 August 1946, from 580th Signal Aircraft Warning Battalion to the 615th Aircraft Control and Warning Squadron (ref IRIS A0531A)
Located: 1953, Schonfeld Site No. 2 Germany; station opened 1 September 1953 (as 114th AC&W)
Reorganized: as 615th Aircraft Control & Warning Squadron, 1 November, 1953 (See 114th AC&W)
Subordinate to: 1953, 526th TCG, Twelfth Air Force
Mission: 1958, Surveillance and direction of interceptors and missiles for destruction of enemy airborne weapons through the media of radar and air/ground communications. Direction of offensive tactical strike forces to their target or to a contact point for handoff to a TDP, and their recovery, both through the media of radar and air/ground communications.
Subordinate to: 1958, 501st Tactical Control Wing
Personnel: January - June 1958, Authorized 81 Officers, 525 Airmen, 19 Civilians, Total 625
Personnel: July - December 1958, Authorized: 60 Officers, 425 Airmen, 18 Civilians, Total 503
Neubuecke, Germany
Located: 1 January 1958 - 30 June 1958, Schonfeld, Germany (Known dates)
Mission: 1958, Control and Reporting Post
July 1964 – June, 1965
Commanders:
1946, Captain G.E. Hunsucker
8 August 1956 - 1958, Lt. Colonel John Kersch

Inactivated: 1 October 1986
Equipment:
1958
AN/GPS-4 Search Radar
AN/MPS-14 height Finder
AN/MPS-16 Height Finder, Received June 1958
AN/MSQ-1
AN/MSQ-1A
AN/GPX-20 IFF
AN/GPX-17 IFF
AN/TPS-10D (2 each)
AN/TPS-1D
AN/MPS-11

Detachment
Located: December 1954, Mausdorf, Germany

Detachment
Located: December 1954, Regensburg, Germany

Detachment
Located: December 1954, Mausdorf, Germany

Detachment 1
Located: July - December 1955, Rothwesten, Germany (Known dates)
Located: July 1956 - June 1957, Duren, Germany (Known dates)

Detachment 2
Located: July - December 1956, Sc_lthorpe, England (Known dates)

Detachment 3/Operating Location 3
Located: July - December 1955, Rothwesten, Germany (Known dates)
Located: July 1955 - December 1958, Adenan, Germany (Known dates)

Detachment 4
Located: July - December 1955, Duren, Germany (Known dates)

Detachment 5
Located: July - December 1955, Driedorf, Germany (Known dates)
Photo: by Claudio Becker

Detachment 6
Located: July 1955 - June 1957, St. Andreseburg, Germany (Known dates)
Located: July 1957 - December 1957, Dri_dolf(?), Germany (Known dates)

Detachment 7/Operating Location 7
Located: July 1955 - June 1957, Adenau, Germany (Known dates)
Located: July 1957 - December 1958, Erbeskopf, Germany (Known dates)
Equipment: 1958, AN/MSQ-1A
Detachment 8/Operating Location 8  
Located: January 1957 - December 1958, Birkenfeld, Germany (Known dates)

Detachment 9  
Located: January 1957 - June 1957, Hertegenbush(?), Holland (Known dates)

Detachment 10/Operating Location 10  
Located: July - December 1955, Wasserkuppe, Germany (Known dates)  
Located: July 1957 - December 1958, Duren, Germany (Known dates)

Detachment 11  
Located: July - December 1955, Birkenfeld, Germany (Known dates)

Detachment 12  
Located: July - December 1955, Winterberg, Germany (Known dates)

Site  
Located: December 1954, Adneau, Germany

Site  
Located: December 1954, Driadorf, Germany

Site 2  
Located: June 1956, Schonfeld, Germany

Operating Location 6  
Located: January - December 1958, Stein, Germany (Known dates)

Operating Location 11  
Located: July 1958 - December 1958, Erbeskopf, Germany (Known dates)

Exercises:  
1958  
Saber Hawk - airborne support for the 7th Army's late winter exercise  
Full Play - test of the result of Operation New Look

Birkenfeld Air Base Germany  
The Base, and several Tech Site locations, was turned over to advance elements of the 602nd Tac Con Sq (TCS) during the summer and fall of 1948. The 602nd TCS was redesignated the 602nd AC&W Sqdn on 23 Nov 1948, just before the unit moved from Darmstadt Military Post, Germany to Birkenfeld/Nahe.

When the main body of 602nd troops and equipment arrived from Darmstadt on 8 Dec 1948, construction of temporary quarters (Quonset Huts) was undertaken to house the troops for the winter. At least twelve (12) Quonset huts were initially constructed for quarters or for administrative offices. One of the major problems during the first harsh winter was an ever-present
sea of mud that hindered all activity. An aggressive base-building program during the next five years led to the permanent structures and base-layout that was so familiar to post-1953 assignees.

615th AC & W SQDN
(1962-1969)
The arrival of the 615th AC & W Squadron commenced a decade long buildup of Birkenfeld Air Station and related facilities. The Rhein Upper Area Control Center on Erbeskopf (previously Cornbeef Control) was operated by US Air Force, German Air Force and BFS (German FAA) Air Traffic controllers until 1968 when that operation was transferred to Frankfurt ARTCC. The 412L Air Weapons Control System was installed at Borfink and the operational “Bunker” facility (Call sign: “Waterhole”) became a high profile operation, contributing to the 615th’s growth into 17th Air Force’s largest aircraft control and warning squadron. Constant training of assigned personnel and NATO counterparts was the order of the day.

Aircraft Control & Warning Squadron
Note: Originally Company B of the 555th Signal Aircraft Warning Battalion
Redesignated: 31 December 1945 as 602nd Tactical Control Squadron.
Redesignated: 23 November 1948, as 602nd Aircraft Control and Warning Squadron
Located: December 1948, Darnstadt Military Post, Germany
Relocated: 8 December 1948, Birkenfeld/Nahe Air Base, Germany, based on Wiesbaden Military Post
Located: July 1949, Birkenfeld, Germany
Mission: 1951, To provide early warning cover to the limits of its equipment, and to provide navigational aid to all aircraft flying over Western Europe.
Subordinate to: 501st Aircraft Control and Warning Group, Twelfth Air Force
Personnel: 1951, 36 Officers and 392 Enlisted
Mission: 1952, to operate and function as a TADC with FDP and TACC capabilities according to the situation requirements and as directed by higher headquarters. Operate and maintain a heavy ground radar station near Birkenfeld, Germany as well as a light ground radar station Southwest of Mainz, Germany. To control fighter aircraft on air defense intercept missions. to control fighter aircraft for tactical air operations in coordination with visual control parties. To operate and maintain a VHF/DF system as an aid to air navigation and furnish aircraft identification within the capabilities of assigned IFF equipment. To organized, supervise and monitor the overall training program of the organization.
Relocated: Giebelstadt, Germany Early 1955,
Notes: Control of Birkenfeld AB passed to the 619th TACONRON from France
Call Sign: Moonglow; changed to Wheaties in 1965
Commanders:
June 1949 - (?), Captain Gene B. Grove
November 1951, Major Toy B. Husband
Equipment: CPS-1; 1951, AN/CPS-4, Serial No. 21, replaced by AN/CPS-4, Serial No. 17; 1958, AN/GPS-4

Operating Location
Located: 1958, Gieblestadt, Germany
Equipment: 1958, AN/MPS-11

Badger

Bloodstone

Exercises:
1951
Yuletide
1952
Barrage
Share Crop

Boerfink Transferred to German Air Force Control. With the inacti-vation of the 615th Aircraft Control and Warning Squadron on 1 October, USAFE passed its last 412L fixed radar site--Boerfink--to the German Air Force. 1986

615th AC&WS / 114th AC&WS

(Source: Wes MacDonald's 615th AC&W Squadron site)
On Nov 1, 1951, the 114th Aircraft Control & Warning Squadron was activated as part of the Florida Air National Guard in Miami, Florida.

In December 1951, the Squadron was relocated to Donaldson AFB in South Carolina where it was consolidated with other units in preparation for deployment overseas. The unit arrived in Germany on Nov 4, 1952 and was assigned to the 526th Tactical Control Group, 12th Air Force, with station at Bitburg Air Base, Bitburg.

On Sept 1, 1953, the 114th was assigned a permanent location at Schonfeld Site #2 (Prum Air Base) in the town of Prum, Germany near the Belgium Border.

The Squadron was inactivated on Nov 1, 1953, and reorganized as the 615th Aircraft Control & Warning Squadron, 526th Tactical Control Group, 12th Air Force, USAFE. (Mission, personnel and equipment remained the same.)

The primary mission of the 615th Aircraft Control and Warning Squadron was to operate and maintain all tactical control facilities assigned within its sector of responsibility and to furnish the Air Control Center with information necessary to conduct air defense.

The secondary mission was that the squadron will be prepared to participate in special missions as directed by this or higher headquarters.
The 615th AC&W Squadron was activated on 1 Nov 1953 at Schoenfeld, Germany. It was attached to the 526th TCG.

(Source: Email from Rodrigo Gebhard, Germany)
I was in the Luftwaffe and was a member of the Fernmelderegiment 32 stationed at Birkenfeld in the late 1960s. We worked side-by-side with members of the 615th AC&W Squadron also based at Birkenfeld. All sections and positions were staffed by either an American or a German airman. The only position that was staffed jointly was that of Crew Chief - manned by an American and a German. I was initially assigned to the ID Section, serving as a Flight Plan Recorder and an ID Operator. Then, after completing additional training in the Weapons Section, I was transferred to an ICT position.

I also served for a long time in the CICT and Flight Follow Controller positions where I worked the US Army Border Mission (RED CATCHER, etc.) and also as the MCT.

The MC was initially always an American, only later did Germans fill that position.

We were bussed with USAF or Luftwaffe buses from Birkenfeld to the CRC at Börfink.

CRC Börfink, 1968
CRC Börfink
Callsigs:
"Erwin" (used by the Germans)
"Waterhole", "Scandalize" und "Hard Tire" (used by NATO).

The complex actually consisted of four separate areas:

CRC/Operations Center
with two large bunkers located at an altitude of 500 meters near the town of Börfink.

Radar site (Tech Site)
located on the top of a mountain, the Erbeskopf, at 816 meters.

Transmitter Site
a UHF/VHF transmitter communications site located on the Ruppelstein mountain at 755 meters.

Receiver Site
a UHF/VHF receiver site located with its bunker on the Sandkopf mountain at 802 meters.
In the late 1950s, an Upper Area Control Center operated by USAF/GAF and BFS (Callsign "Cornbeef Control") was located on the Erbeskopf.

The Operations Room at Börfink was designed similar to a movie theater, with tiered levels (rows of positions, consoles, etc.). In the front of the room, the large, plexiglas plotting board of the radar coverage area. When I first started working as a plotter, I had to learn to write backwards to write track related information on the back of the plotting board. This way the information could be read and understood by those in front of the board.

With the introduction of automation (412L), the targets and relevant information were projected onto the plotting board by a device called the "light valve". The targets would move on the board similar to what would be seen by a "scope dope" on the PPI consoles.

Looking at the tiered levels from front to back, the ID-Section was located in the first row. One row higher was the Surveillance Section; the top two rows were occupied by the Weapons Section. The Master Controller sat all the way in the back overlooking everything. The ARMY MCC personnel also sat in the back, on the left. Everything was dark, just the steps leading up to the different levels were lit.

The Sector Operations Center (SOC-3) was located at Kindsbach, from 1967 to about 1989, and then for a long time at Börfink (into the 1990s). Its Call signs were "Logroll", "Captive" und "Copper Ring". Individual SOC tasks were assigned to CRC Börfink periodically (MIDO etc). Commander of the SOC was the Sector Controller, always an American.

CORRECTION
(Source: Email from Heinz-P. Deutsch, 2nd Company, 32nd Fernmelde (Signal) Regiment, German Air Force, 1969-70)
Transmitter Site -- a UHF/VHF transmitter communications site located on the Sandkopf mountain at 802 meters.
Receiver Site -- a UHF/VHF receiver site located with its bunker on the Ruppelstein mountain at 755 meters.

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(Source: Email from Robert Burgett, Börfink CRC, 1971-74)
I can't vouch for 1968, but in 1970 there was an additional function not shown here: that of FA or Fighter Allocator. This later became WA or Weapons Allocator. This was the position that actually scramble alert aircraft.
I was an IC/WA/MC beginning in 1971 as a second lieutenant and was at the time the youngest WA and MC—we had a shortage of field grade officers. I was reassigned to the U.S. in Dec., 1974.

Briefly, the WA (or FA in 1971) had scramble authority. Later, in my 4-year tour, not even the sector controller at the SOC could scramble without calling up the chain. The FA or WA, during every shift, conducted a briefing over the TAC loop: "Attention on the loop, this is the WA. All units check in with how you read the WA."

Sites checked in, verifying whether they could receive or transmit over the loop. Scandalize, Shanty, Rooter, Batman, Patrick, and Cold Track--plus the 3 fighter squadrons. I believe the SOC also responded but I have to think about that one.

"The sector controller is Colonel Blank. The master controller is Major Blank2. Master CRC functions are at Scandalize."

The FA/WA then gave any NOTAMS ("Ramstein, ILS out"), a listing of active runways were given for Ramstein, Hahn, Bitburg, Wiesbaden, and Neuberg. (I'm forgetting 1 to 3 here, I know there was an even number, and the order might be screwed up except Ramstein was definitely first).

Then fighter units "on mandatory" were given, if any.

Any site whose TAC loop did not work was announced as being "on ring status" meaning you had to call them via ESC or a land line. "If there are no additions or corrections, this concludes the weapons briefing."

I need some time to think about all this. WA's might have given a list of 3 zulu alternative recovery airbases during their briefings. I remember stuff like active runways, coordinates of the 3 U.S. bases from the Erbeskopf. I can give you an example of dialogue when "the light" was activated, indicating a buffer zone or ADIZ violation, a flight off flight path, or other aircraft problem or emergency.

I guess I was young and impressionable because no one in their right mind should remember this stuff after over 40 years!

Additional Callsign Info
The RP at Burglangenfeld, I lost my place now on the website and can’t remember it now, was known as “Trumpet” in 1971 at least. I don’t remember if its name changed at the same time the 615th changed from “Scandalize” to “Hard Tire” or not. By the way, there was an abbreviated or aborted change sometime in the early 1970s when for a day or so, “Scandalize” was known as “Burneo.” Yes, not Borneo, but Burneo. Grateful for that abortion, not that “Hard Tire” was much better.
Robert Jordan, Det 1, 615th ACWRON, in front of 412L Console, 1973

(Source: Email from Robert Jordan, Det 1, 615th ACWRON, the "CAVE," 1972-74)
Just another "scope dope" fresh out of VietNam and another TACC, I was assigned to Kindsbach as a radar operator at the ADOC/SOC. My memories are of very boring long shifts, in which we played a lot of card games. As we were not controllers, our mission was no more that just monitoring and updating the information on the scopes and boards for the commander downstairs. And, giving the French liaison a hard time.

We worked 9 days on, and 3 days off. 3 days, 3 swings and 3 mids. Often, because of an overage of personnel, we would get an extra 2-3 days within the 9 days. And, sometimes it would coincide with the normal days off, leaving a great 6 day stretch of offtime. This is when I would hit the train and head to Paris for 4-5 days.

The Air Force housing for enlisted was at Ramstein AFB. Because we were a small squadron, we got shuffled to different barracks every 10-12 months, or so it seemed. I lived in 3 different locations over 2 years. Once, we were the only Air Force in the midst of an Army barracks. Then, once on a floor full of AFN troops.

Meals at Kindsbach were at the small dining facility inside the caves. There was a civilian Italian cook that took pride in his work. They served breakfast and lunch only. Dinner was either brown bagged in, or you caught it at the regular chow hall at Ramstein (yuck). I remember having steak and eggs once a week on Friday's and even Lobster a few times when major brass were visiting.

As a NATO facility, we were often entertaining officers from different countries. There was a small breakroom outside of the entrance, where coke machines and sandwiches were "sometimes" available. Oh, and an early microwave oven. Which, one slightly crazed French liaison officer would blow up things on a regular basis. He couldn't get the idea that one should not put foil or uncooked eggs in shells, or other non microwave items....in the oven. After any near miss, you would see him pacing around the outside perimeter...cursing in french and talking to himself.

I recall wandering, just a little bit, around the tunnels and never seeing the entire facility. There were tunnels that would end at sealed doors. Doors that were sealed at the end of WWII and never re-opened.

I have lost touch with almost everyone that was stationed with me in the early 70's over there. One exception is a mad Greek by the name of Grafanakis, who was my roommate. He's turned up in Arizona, and keeps in touch via letters and an occasional email. But, others like "dirty" Ernie Goodman and Tom Dunham, have drifted in oblivion over the years.

Hindsight's always 20/20. If I had known then, what I know now, I would have traded SS numbers and parent's home addresses and any other way to find them over the years. Even web searches don't always pan out.
BTW, I have a lot of photos taken of people that were stationed there. But, very few of the facility itself. We were always a little intimidated by our Top Secret clearances and didn't always chance taking cameras into the Cave.

ADDITIONAL INFORMATION
My memory fails me a bit, but I was an SDO which I believe was Situation Display Operator or Surveillance Display Operator, at least that was one of my assignments. These were surveillance consoles and were on the 2nd floor of the SOC.

I believe I mentioned some time ago, and you have it posted, that the 3rd floor was not occupied when I was there. So, we had our officers and senior enlisted, on the 1st floor below us. On our floor were two consoles sitting across from each other, on opposite sides of the room. Slightly in front of us, at the end of the floor overlooking the 1st floor, were two positions (no scopes) of the French liaison personnel....usually two enlisted men. I wish I could remember their names and rank, as we became good friends. I went and visited them and their families on more than one occasion and had a great time.

My job consisted primarily of simply watching tracks and updating status information. It was similar (in my opinion) to Monkey Mountain Vietnam, which was a BUIC II site, and my job there was an Air Surveillance Monitor and Interface Systems Tech. Motel was a Tactical Air Control/Command Center and our job was surveillance and not aircraft control. The same can be said for Kindsbach. It was a Combat Operations Center, and most decisions were made by the commanders below us on the first floor. The large projection screen was in operation when I was there. There was no Plexiglas plotting screen, and the projection came from the small back-set floor above us.

Kindsbach - Kindsbach Underground Facility - Robert Jordan is the moderator of a new Yahoo Group site for vets from all services who were stationed or worked at Kindsbach Underground Facility in the 1960's, 1970's, and 1980's before it was closed.

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(Source: Email from Pat Michael, 615th AC&W Sqdn, 1962-63)
I was assigned to the 615th AC & W Squadron at Birkenfeld, approximately 90 miles west of Frankfurt, Germany between 1962 and 1963. We helped to control the three corridors leading to Berlin. I worked in the Identification Section of the radar site and was responsible for identifying all aircraft that did not have an active flight plan. The location of the underground control center was located in a mountain called Erbeskopf. Is the air station in Berkenfeld still active?

Getting to Erbeskopf required a bus trip from the air station to the mountain, followed by a long walk through a tunnel to the Operations Room. I was also able to get on top of Erbeskopf (at one
point) and saw one search radar and one height finder radar and a beautiful view of Germany and Luxemburg.

First, when I arrived there, the CRC as you call it, was not fully staffed -- the ops. room was basically empty. The operations room was one large room with several tiers. The front of the room had a large Plexiglas display which was used to plot aircraft movement. The display showed East and West Germany and the three fight corridors into Berlin and many other details that I don't recall. We controlled fighter aircraft out of Ramstein and Bitburg.

The top tier was the senior director who was responsible for launching and controlling fighter intercepts and training.

Other tiers contained the controllers whose job was to control those fighter aircraft.

The remaining tiers had search radar scopes and height finder scopes.

The search radar scope had a sweep that rotated several times per minute and the height finder scopes rocked back and forth like rocking chairs. Both types, but especially the height finders, were great for putting you to sleep especially if you worked midnights.

The lower tier was where I worked with another US airman. Our section contained teletypes, phones, flight strips and scopes. We were responsible for identifying all aircraft in West Germany and the three flight corridors leading into and out of West Berlin as well as any aircraft crossing from East Germany.

There was a separate briefing room, which was used for mission planning for the day, and what the Russians were currently up to. They had a bad habit of crossing the border with their aircraft as did we. Mutual reconnaissance as they say. They were dangerous times!

A cafeteria/lounge room was where we eat, played cards and napped.

And of course there were bathrooms. The toilet paper was like thin cardboard. It's amazing what you remember and what you forget.

The scopes were manned by Germans, French and Americans. This site was akin more to what you would see at a control center during WW II. Comparing this 412L system, is like comparing radar equipment used during WW II, but somewhat better. The SAGE computerized radar control system used in the States during 1962 was and is still is highly sophisticated.

SAGE, which is an acronym for Semi Automatic Ground Environment (what that name has to do with a computerized aircraft control system, I don't have a clue) was the forerunner of the highly computerized aircraft control system used by the FAA today. If you want to know about the radar system used in 1962 (SAGE), my mind is very clear on that topic. Why I was sent to tech school to learn another radar control system that was, what I consider slightly better than that used during WW II, and then to be discharged 18 months latter, along with many other controllers was a
mystery. I found out later, we became obsolete. Well that is the best that I can recall on the 412L system.

(Source: COMMUNITY NEWS, April 9, 1982)
615th extends TDY

by Randy Nelson

The members of the 615th Aircraft Control and Warning Squadron (ACWS) will continue going TDY to the 603rd Tactical Air Control Squadron (TACS) near Sembach AFB until the spring of 1983. The new German Air Defense Group Environment (GEADGE) system, replacing the old 412L system, has encountered problems which have caused a delay in the operational date of the system. The 603 TACS began full time air defense operations to replace the radar coverage left when 412L system terminated operating here in September 1980.

Although extremely disruptive to personal and family lives, the members of the 615th continue meeting the rigorous TDY schedule with few complaints. They know there's not much they can do but grin and bear it. This slippage will not mean that some people will spend most of their 3 year tour in Germany in a continuous TDY mode.

(Source: Email from Ronald "Smokey" Bassett, MSgt & GS-12, USAF Retired)
Came across your web page on Europe and thought I would share some things with you about the USAF radar units.

Your page shows:
ADOC, Kindsbach, Germany. Det 1, 615th AC&WS. Located in an underground bunker called the "Cave". In the 1950s, the Air Force, in conjunction with NATO, used a manual plotting system to display the European air picture to the NATO staff; in the early 1960s the semi-automatic 412L system was installed.
SOC, Langerkopf, Germany. Andrews. 615th AC&WS SOC-3 was previously known as "Smallarm" – Changed to "Andrews" effective 1 Nov 61. SOC-3 moved to Börfink in 1965?

Here is an update:

Det 1, 615th ACW    Det 1, 615th AC&W Sq. I was stationed with Det 1 from Jan 1979 to Aug 1983, and as the last Unit NCOIC I closed the USAFE unit in the summer of 1983. At that time SOC-III was still in full operation in Kindsbach, and when I left Germany in 1985 it was still there. SOC-III had military personnel from most of the NATO nations, and a small French Air Force contingent. Det 1 was located on the second level of the 3-level command bunker, on a veranda
overlooking the main SOC-III operations floor. Our personnel used the 412L system to feed information to the SOC. Det 1 also had a small intelligence cell, with about 5 intel officers assigned. They worked in a well secured "vault" built into the cave. Besides these officers we had a Capt as the commander, and the rest were NCO's.

ADDITIONAL INFORMATION
Det 1 was the USAFE unit supporting SOC III. We were located on the second tier [D Area - 2nd floor on your chart] of the bunker, overlooking the bottom floor operations area. Our admin offices were on both sides of the hallway leading from the main entrance (turn left...) leading to the bunker. My training office was on the left - with the tiny bathroom. There was no German counterpart to our unit, but the French desk was on the same tier -- and they worked very hard to produce at least one new model ship (!) every several months. No, we never did figure out what their role was - except to watch what was going on below.

The photos on your site show there were changes made to the 2nd floor after we departed, closing in the front of the floor from below. I assume that is where the ADOC moved into after USAFE handed over the unit's floor space in the summer of 1983, which was my job as the last site chief/unit NCOIC.

Det 2, 615th AC&W Sq. I was stationed at Det 2, 615th ACW from April 1968 - April 1972. Det 2 was also known as the Air Movement and Identification Section (AMIS) and worked as a liaison with the German Air Traffic Control (BFS) within the Frankfurt & Rhein Control Centers located at the Frankfurt International Airport. The unit passed flight plans of aircraft going into Berlin, as well as others that would cross the east border. Det 2 was an all NCO unit, with a Chief (E-9) as the detachment commander.

(Source: U.S. Military Steins web page by Louis Foster)

Det 3, 615th AC&W Stein Det 3, 615th AC&W Sq. This detachment operated 4 ATAF's Air Defense Operations Center (ADOC) at Kindsbach.

(Source: Jeff States, 615th AC&WS, Kindsbach, 1962-66)
From 1962 -1966 I was stationed with Det 3 at the Kindsbach ADOC. With the installation of 412L our mission was to project and update the current “air picture” of East & West Germany onto a large screen that was monitored by USAF & NATO personnel. Det 3 was commanded by a USAF Lt Col and the NATO operation was commanded by a German Lt Col. The US forces made all decisions. The French also had 2 enlisted personnel assigned to each shift.

(Source: Ian Montgomery, 615th AC&WS)
You have an interesting site. FYI: SOC-3 moved from Kindsbach in 1983. I worked for the Sector Controller, Allied Sector Three. I was the last U.S.A.F. NCO there to pull the plug. I was administratively sub to the 615th, but operationally to SOC-3. I went to Ramstein for a few months before DEROSing stateside.

The cave (KUF) was under administrative control of an FRG Colonel. He had been Luftwaffe during the war and had served there as a Lt. One Christmas eve he joined us on the mid watch and read a report that he had written during the war while stationed there and then found in the files when he came back to command the facility.

Locals told me that the Allies had never taken the KUF during the war and they (the residents of Kindsbach) used to hide in it during air raids.

The KUF's history pre-dated WWII and it actually had hosted all of the Nazi hierarchy at one time or another, even serving as the HQ for the Western War for some time. Having spent three years there, I can believe it.

(Sources: STARS & STRIPES, June 14, 1969)
The Air Defense Notification Center is manned by personnel from Det 2, 615th AC&W Sq. The office is located inside the Frankfurt International Airport's traffic control tower. The mission of the Notification Center is to extract from the nearby German radar operators and traffic controllers information about any aircraft entering Allied Sector III airspace. (Air defense radar sites in the SOC III area that pickup aircraft they cannot identify call the Notification Center to get the information.)

The detachment, staffed with one officer - det commander - and 20 men, works in shifts of six men around the clock, seven days a week. The Det was assigned to the Rhein-Main airfield in 1957.

The Frankfurt traffic control center is responsible for tracking, guiding, and checking both civilian and military aircraft through their assigned checkpoints to insure that flight plans are followed and border violations or incidents are avoided.

At this point in the development of the European TACS, a parallel situation developed in that the 526th TCG was activated at Spangdahlem AB on 1 November 1953. Its operational component units were the 619th TCS (Toul-Rosiers AB, France), the 604th AC&WS (Freising, Germany), the
615th AC&WS (Pruem, Germany), and the 616th AC&WS (Ulm, Germany). These subordinate units came from several sources. For instance, the 604th AC&WS had originally been Company "D" of the 555th and was assigned to the 501st TCG prior to 15 July 1952. At this time, control of the 604th passed to the 155th TCG prior to being assigned to the 526th TCG in November 1953. Conversely, the 619th TCS was a newly activated unit which took over the personnel and equipment of the just inactivated 121st TCS? an National Guard unit whose main element arrived in Europe on 4 November 1952. In any event, like the 501st TCG, the 526th reported directly to Twelfth Air Force under USAFE.

On 1 July 1955, the 501st and 526th TCGs merged to form the Tactical Control Wing, Provisional. In all, this consolidation process brought a number of elements together to form Twelfth Air Force's tactical control system. These included two tactical control squadrons (the 897th TCS and 619th TCS), six aircraft control and warning squadrons (the 601st AC&WS, 602nd AC&WS, 603rd AC&WS, 604th AC&WS, 615th AC&WS, and 616th AC&WS), and three Shoran Beacon Squadrons (the 3rd, 6th, and 7th Shoran Beacons). The Tactical Control Wing, Provisional, was created as a tentative measure designed to improve the effectiveness of the radar and aircraft control organizations within Twelfth Air Force. After operating as a provisional wing for two years, the unit had ample opportunity to determine the most suitable type of organization for the effective accomplishment of the USAFE tactical control mission. Accordingly, on 18 December 1957, this tentative status was dropped and the unit was designated the 501st Tactical Control Wing. Finally, on 18 November 1960, the 501st TCW merged with the 86th Fighter Interceptor Wing to form the 86th Air Division (Defense). For the next five years the various TACS elements under the 86th Air Division went through a series of relocations, activations, inactivations and redesignations.

Four months later, on 1 November 1968, several of the Central Region's fixed radar sites came under the wing's control as the 86th Air Division relinquished responsibility for its three subordinate AC&WS squadrons. These fixed elements were the 606th AC&WS (a reporting post at Doebraberg), the 615th AC&WS (a control and reporting post at Birkenfeld Air Station), and the 616th AC&WS (a control and reporting post at Wasserkuppe). This transfer brought together the 412L fixed NATO air defense system with the 407L mobile air control network. Several other significant events also occurred on 1 November 1968 as wing FACPs began converting to the new "two dimensional" TPS-44 radars and several detachments were activated. The newly activated detachments at 3 (Freising) and 6 (Giebelstadt) provided operational assistance at fixed radar sites owned by the German Air Force (GAF). The third detachment activated, Det 4 at Ramstein, was a consolidated field maintenance facility for the USAFE 412L radar system.

Going into 1977, the 609th TCS and its two subordinate flights were declared operationally ready on 1 February. Also, yet another TACS milestone was reached on 22 March 1977, when the 603rd TCS received the first two "E" model TPS-43 radars. After initial checkout at the 603rd TCS, one of the TPS-43Es was sent to the 601st TCS on 22 April 1977. Four days later a TPS-43E radar was used for the first time in an exercise as the 601st TCS participated in Certain Fighter. Eventually, all wing mobile radar units would receive the TPS-43E radar set. Indeed, on 4 October 1977, the 603rd TCS started an extensive four week training program for the final 13 newly arrived TPS-43E radars. Each unit in the wing practiced setting up their own radar at the 603rd's technical site in Mehlingen. This period proved to be a busy time for the 603rd TCS which, along with the 615th
and 616th AC&WS, participated in an E-3A AWACS demonstration in November and December 1977. The purpose of this demonstration, which proved to be very impressive to NATO officials who observed the activity, was to advertise the advanced capabilities of the E-3A to provide improved air surveillance for the European theater and its ability to down-link data through the ground environment system. The 603rd TCS deployed to Gruenstadt from 9 November through 15 December to support this demonstration. In several other TAGS related events during the year, on 14 November 1977, the 626th and 636th TCFs moved off Carl Shurz Kaserne to a location on top of the Bremerhaven City Dump at Muehlplatz Grauer Wall, just down the road from their previous site. They would operate here, literally surrounded by garbage, for the next three years. Also, on 1 December 1977, the 636th TCP controlled its first mission, a sortie of two F-111s out of RAF Lakenheath, England. However, like the other two newly activated units, they would not be fully operational for several months.

TPS-43E activity dominated the early months of 1978. On 20 January, the 606th TCS became the last CRP to receive the new radar set and several months later, on 31 March 1978, the remaining eight TPS-43ES stored at the 603rd TCS were released to the gaining FACPs. At this time, only two wing units still operated the TPS-44—the 626th and 636th TCFs. However, on 8 May 1978, TPS-43E radar sets became operational at the last two FACPs. This completed the wing's conversion to one type of radar set for the first time in the history of the 601st TCW. Several other operational "firsts" also highlighted 1978. The 629th TCF assisted the 636th TCF in its first practice deployment from 4 through 7 January 1978 and the 606th TCS controlled its first practice intercept several weeks later on 2 February. The intercept involved F-15 aircraft from Bitburg AFB. On 22 March 1978, the 606th TCS, 626th TCF, and 636th TCF officially came on line as operational units and were declared fully operationally ready. Their sister radar units in 2 ATAF had previously achieved the same status on 1 February 1977. Also, in another key development, a change of command ceremony was held on 31 December 1978 which passed control and ownership of the Wasserkuppe 412L fixed radar site from the wing to the German Air Force. This concluded the transfer of various 4 ATAF 412L sites to the Germans that had been planned since 1959. On the next day, the 616th AC&WS was officially inactivated. Since the 606th AC&WS was previously inactivated and the Doebraberg site turned over to the GAF on 1 July 1974, only the 615th AC&WS fixed 412L radar site at Boerfink remained assigned to the wing. The remaining five fixed radar sites were now owned and operated by the German Air Force.