A new profession is born!

AIR TRAFFIC CONTROL

A look back into the first years

The 1949 “Bremen Boys”

Rhein-Main Airbase Frankfurt/Main, South Side
1948/49 Aerodrome Control Towers during the Berlin Airlift
US - Air Force

A Report by Frank W Fischer

23 May 2012
A Report on the Evolvement of the Profession of the AIR TRAFFIC CONTROLLER in Germany after WW II
- the first steps as of 1949 -

compiled by

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I. THE POLITICAL SITUATION

We are writing the year 1949. The Second World War is over and Germany is divided into four occupation zones, a russian in the east, a british in the north, an american in the center & southeast, as well as a french in the west & south; see ICAO EUM III chart in document 7266 of 1952.

The Berlin Airlift is still in full swing and additional alternate airports are required besides Hamburg, Frankfurt, Fassberg and Wiesbaden. On May 10, 1949 the “Occupation Statute” of the three High Commissioners of Great Britain, France and the USA comes into force. During the same year a Civil Aviation Administration of the western occupation forces was established, called “Allied Civil Aviation Board – CAB” with its american branch (CAD) under jurisdiction of the US State Department and HICOG. The overall jurisdiction over the air navigation services, civil air traffic and the aerodromes was now vested in the CAB, administered by the representatives of the american, british and french occupation forces.

Chief of the american department of the CAB was Mr. Thomas Johnson, his deputy Mr. L. C. Moore, the one of the british department was another Mr. Johnson and the french representative was Mr. M. Guillaume. The Soviets maintained loose contact to the CAB through their military liaison unit at Frankfurt / Niederrad.

Then, on May 24, 1949 the Federal Republic of (West) Germany comes into being. Regular civil air traffic by airlines only took place as of January 1950 and the CAB under control of the High Commissioners initiated the establishment of a common german administration for all matters regarding air navigation. Following the CAB’s initiative the newly formed ministry for transport established a preliminary unit for the creation of the “Federal Administration for Air Navigation Services” in December 1951, located first with the CAB at Wiesbaden and then in the IG Farben building complex downtown Frankfurt/Main.

Messrs. Tom Johnson and L. C. Moore, Munich 1968
As chief of this unit Dr. O. Heer, who had already served with the administration of the “Reichs-Flugsicherung” before the war, was appointed by the MoT, assisted by Messrs. Möbius, Geisser and Garczyk. This unit moved together with the CAB to the IG Farben building on February 1, 1952 and then opened separate offices in annex-A behind the same building on August 6, 1952. After three years of preparations the law on BFS (Bundesanstalt für Flugsicherung) finally took effect on March 23, 1953.

The other staff members of the preliminary unit became Dr. h.c. Karwarth, thereafter working for the forerunner of Lufthansa, the “Luft-AG”, and Mr. P. Berger, who as of 1951 had worked directly for the CAB and now joined ICAO’s European office in Paris until his retirement. On February 6, 1952 Mrs. Süsserott of Estonia was hired as secretary. The requirements for her job were good command of the German, English and Russian languages, shorthand and typing. Mr. Möbius in later years also worked for Lufthansa. The others worked for BFS until their retirement.

With BFS now in existence and beginning to operate Dr. Ing. Heer was assigned as its first director and later on became its president. In this function he and Mr. Möbius already participated in the 1952 ICAO EUM III conference in Paris as observers and advisors to the three CAB representatives, despite the fact that Germany was not a member state of the International Civil Aviation Organization as yet. But in 1953 West Germany also was not sovereign yet and therefore had only part – jurisdiction over its airspace under “subject to exceptions” rules of the occupation forces. This situation only changed with the Paris agreements and Germany’s accession to NATO (founded on April 4, 1949) in 1955 when the now Federal Republic regained sovereignty.

The new German Air Force came into existence in 1956. For these reasons the law on BFS foresaw that all flights which were not handled by aerodrome and approach control units of the occupation forces and those operating under control of air defense units come under the
jurisdiction of the BFS, be they civil or military. This regulation remained unchanged also beyond 1956 and was again reconfirmed by the MoD and MoT in 1959.

Likewise, also the preliminary council for the reinstitution of German airline operations had been established by the MoT in 1951. As a consequence the “Luft-AG” was founded on January 6, 1953, which later on was given the name “Lufthansa” in succession of the pre-war Lufthansa again. Heated discussions took place thereafter with the MoT of East Germany, because also they had reinstituted “Lufthansa” as a German airline, mainly operating Ilyushin-14 airliners in the beginning, whereas West Germany used the Douglas DC-3 and Convair 240 Metropolitan aircraft. East Germany finally agreed to rename their “Lufthansa” into “Interflug”. Dr. Karwarth became one of Lufthansa’s first directors. Airline operations of Lufthansa were resumed on April 1, 1955, whereas before only Air France of France, British European Airways of Great Britain and American Overseas Airlines (AOA), which became PANAM, of the USA, and Aeroflot of Russia had conducted regular scheduled flights into and over Germany as of 1950.

Meanwhile, and before the Berlin Airlift the first air route traffic control centre (ARTCC / ACC) had been put into operation in 1947 in West Germany on the top floor of the IG Farben building downtown Frankfurt by the US Air Force under jurisdiction of HICOG. Superintendent and chief controller of this ATC centre were USAF Cpt. Chabeaux and Cpt. Mills of the 1968th Airways Air Communication Service (AACS) of USAF until the relocation of this centre to Rhein Main airport (north side) on April 21, 1953.

The US branch of the allied CAB in Wiesbaden had already employed a few German civilian air traffic controllers, who worked in joint teams at Frankfurt ARTCC with their AACS colleagues; but more about this, at that time, unusual development later.
Apart from ongoing war activities the International Civil Aviation Organization (ICAO) had been founded in 1944 in Chicago on the initiative of the USA. This new international organization, then still called Provisional – ICAO, began to operate worldwide in 1947; in Europe with a regional office in Paris for ICAO’s Europe Region. It set-up common standards, recommended practices and procedures for uniform application of rules of the air, the provision of air traffic (control) services, aeronautical telecommunications, aircraft operations, search & rescue, aeronautical information service, personnel licensing, etc. In 1952 headquarters USAF in Washington ordered all their overseas units to also apply these ICAO standards in their operation. The US branch of the CAB had already trained its new german controllers in accordance with these ICAO rules since 1949. BFS also did so as of 1953, despite the fact that the FRG became a member of ICAO only in 1956, once it had regained sovereignty. Germany’s accession to ICAO had been a precondition of HICOG for the establishment of BFS, which proved to be a wise decision.

The first ARTCC in West Germany, solely operated by german controllers was Munich, formerly run by the 1972nd AACS squadron, having started operation on January 15, 1953 with Frankfurt following in April 1953. But both, for a few more months remained under jurisdiction of the CAB.

With the coming into force of the law on BFS in March 1953 the ARTCC moved from downtown Frankfurt to the airport; see Stars&Stripes report April 22, 1953. On June 1, 1953 all german ATC staff was now officially taken over by BFS. Another month later the jurisdiction over all air navigation matters also changed from the CAB to BFS (July 1, 1953), however ATC licences were still issued by the US CAB branches until 1956, when the FRG joined ICAO.
As of July 1953 only German controllers then provided air traffic control service at the civil air navigation services units in the country, except for Frankfurt approach control (RAPCON) and aerodrome control tower (TWR), which were located at Rhein Main AB until 1957, and which remained under the 1945th AACS command until December 1959, employing joint AACS / BFS teams.

II.

PERSONNEL

Before 1947 the occupation forces operated the airports and the air navigation service units without German personnel. The British however began to employ German staff as of 1947/48 at the airports of Hamburg, Cologne, Hannover and Düsseldorf at base operations (BASOPS), for direction finder and ground/ground telecommunication services. Some of these first German post-war employees had already been working for the “Reichsflugsicherung” before the war.
The hiring of Germans for ATC only began in summer 1949 for movement control of flights within the scope of air traffic control by the US department of the CAB with advertisements in the German daily newspapers. One was seeking to hire staff for the Allied – CAB with at least 21 years of age, but not older than 32 for training and employment in the US occupation zone. This intention caused tough British and French political opposition and especially fierce Russian complaints.

A precondition for the selection procedure had been good command over the English language, high school graduation or equivalent qualification and two years of flying experience. The selection of the applicants was performed by the three American CAB representatives, Mr. L. C. Moore, Mr. G. Waller and Mr. D. Thompson. In Munich and Berlin a few hundred men applied for this new job, in Stuttgart alone over 2000. But only 40 were on demand at that time for aerodrome and approach control services at the airports of Bremen, Nuremberg, Stuttgart and Munich.

The first course for the job of air traffic controller took place by the CAB on behalf of HICOG from October 3 to December 2, 1949 at Bremen airport. Additional courses, conducted by the 1807th AACS unit, took place at Freising near Munich and on area control from January 7 to February 16, 1951, thereafter at Munich-Riem airport and led by Mj. W. C. Zelinski.
The CAB at Wiesbaden was administered by civilians, while AACS units came under USAFE command. The 40 male participants, selected from the many applicants, came from all over post-war Germany and travelled on US military orders. Their first US instructors were Mr. Charles Myers and Mr. G. Waller, assisted by Mr. Frank B. Lehn and Mr. Jack Lanius. Messrs. Waller and Myers also conducted the succeeding aerodrome & approach control courses at Munich airport, while the AACS took care of the area (enroute) control courses. Years later Mr. Waller became the US FAA representative for Europe, Africa and the Middle East at the FAA office in Brussels. He had been setting up the CAB ATC school in Munich, which was also turned over to BFS in 1953.

![Messrs. Gerorge Waller, Charles Myers and Thomas Johnson of the US CAB 1950](image)

Until the end of the same year this school, today an air navigation academy, had conducted 14 aerodrome, approach and area control courses. Out of the first 40 trainees evolved 211 controllers until 1954. Already in 1952 a demand of 85 additional controllers had existed for the Frankfurt and Munich centres. So, with additional American instructors lacking, a few of the first 40 also became ATC instructors. From the original number of applicants 210 had passed the preselection, with this number finally decreasing due to lacking “political clearance”. Altogether, as of December 1951 the number of employees in air navigation raised from the initial 4+1 to 232 in 1952 and to 732 until December 1953.

Ab-initio courses for training of newcomers to the profession, limited to aeroautical (preflight) information service and flight data processing already had begun in 1948 in the British zone. The first RAF courses on aerodrome control (A-licence for control of visual flights) and approach control (B-licence for aerodrome and approach control instrument flights) began in October 1951 at Hamburg, Düsseldorf and Hannover. Four area control (ACC) courses took place from October 1, 1951 to October 28, 1952 at Hamburg airport; some already also for assignments to the Bad Eilsen centre.
Early, published selection criteria of BFS for ATC service applicants encompassed a weird number of personal qualifications, which must have made successful candidates post-war heroes of unequalled attributes. These selection criteria were power of conception, decisiveness, sense of responsibility, power of concentration, division of attention, three-dimensional spatial orientation, foresight, memory, usage of language, command of the English language, technical understanding, navigation talent, meteorology talent, flying experience, sense of tact / sensitivity, neatness, balanced temperament and the medical requirements of ICAO Annex 1.

Already in the first years of ATC operations of BFS additional assessment criteria during practical training, such as rate of work, ability to react, sense of responsibility, command of the English language, person of character, appearance, manners, duty behaviour, punctuality, dependability, sociability, memory power, carefulness, clarity of judgement and resilience were applied. Regarding the trainee's mental development coaches were asked to judge their temperament, activity, ability to think, adaptability and skillfulness and to also report on their trainees' will to work, diligence, perseverance, prudence, cleanliness, tidiness, conscientiousness, their social behaviour, manners, comradeship, helpfulness and behaviour to superiors. The latter seemed to have special significance in Germany's post-war bureaucratic federal administration. Younger generation followers in ATC, however, had great difficulty in trying to find one of those heroes among their older colleagues and to fulfil the same criteria themselves.

It seems one had a lot of time. Whereas OJT for ATC under HICOG and the US branch of the CAB lasted three to eight months in the average, depending on the subject, it took BFS up to three years to train ab-initio controllers to become fully proficient. This period, however, included one month initial familiarization and two courses at the school over six and three months duration, often followed by another three months long radar course. Munich certainly was a good place for the school.

III.
ATC AND INFRASTRUCTURE

ATC area control operations in those years were performed in the form of conventional, procedural control, i.e. non-radar. Except air defense units of the occupation forces only precision approach radar (PAR) for final approach was used at civil airports. These were used as GCA – units (ground controlled approach), i.e. with a PAR and a SRE (surveillance radar) component in combination.
Since BFS was unable to conduct such courses, USAF/AACS now also trained the new German controllers on GCA radar service procedures. The first such course took place at Munich airport from April 20 to May 5, 1954. Five German controllers attended. The same course later in the same year was extended and continued under 1947th AACS unit instruction. The participants were Messrs. Berg, Beyer, Göbel, Kriegsmann, Lang and Marzusch.

Another course the same year saw Messrs. Adam, Beyer, Breinl, Göbel, Günter and Scheibe as well as in 1955 Messrs. Denstorf, Döll, Estel, Etzler, Frank, Herkner, Neumann and Tietze attending and being assigned to Frankfurt RAPCON and TWR in 1955. Stars&Stripes reported on this unusual development under the headline “First Germans complete GCA course under the 1947th AACS at Wiesbaden airbase”. More should follow. Still available photos of 1958 show controller R. Beyer in front of his GCA console at Frankfurt approach. Civil aerodrome surveillance radar (ASR) did not exist as yet in Germany in 1954. One operated mainly mobile GCAs for final approach guidance. Frankfurt ACC however, at the beginning of the Berlin Airlift still located in the IG Farben building and operated by USAF, already worked with an air defense type CPS-5 long range radar with 220 miles range capability and IFF – secondary surveillance radar on top of the building.

The temperature in the operations room often reached 40 °C. There were only two roof top windows in the ceiling. Control boards were handicraft constructions from cratewood. Radar consoles were equipped with heating stove pipes to lead the heat to the outside.

Pilots navigated by LF/MF radio navaids like four-course range (RNG), non directional radio beacons (NDB), visual aural range (VAR), by hyperbolic systems like GEE, CONSOL, DECCA and LORAN. In the Frankfurt flight information region (FIR) the Rhein–Main range (ID DIF, later RHM) was set up on final approach to the airport; followed by Wiesbaden...
(WBD), Fulda (FUL) and Salmünster (SAL), as well as Idstein, Rüdesheim (RUD) and Salmünster (SAL) NDBs. It was practically only possible to separate flights from each other by time intervals and vertically, which constituted a significant reduction of one’s control possibilities.

Voice radio frequencies often reached out to only 40 or 50 miles. So, flight clearances to pilots and position reports had to be passed on via relais stations, such as Spangdahlem RAPCON, which still exists 60 years later, as does Ramstein RAPCON. Their correspondents at Frankfurt ARTCC soon could no longer handle the mass of such messages. The C-controllers, the men with the microphone and “say so” in an airspace sector, had to pass estimates on their sector outbound flights themselves, besides their primary duty of separating the flights from each other. This primitive and very provisional kind of ATC should prevail for a good number of the following years.

The Royal Air Force (RAF) in the north preferred another operations concept than USAF. In the british zone, equivalent to the Bad Eilsen (later on called Hannover) flight information region (FIR) only air traffic advisory service (separation only between known participating flights) was provided, while in the american control areas (CTA) of Frankfurt and Munich already proper air traffic control service was performed. The boundaries of the FIRs at that time corresponded to the delineation of the occupation zones.

IV.
THE FIRST

Our ATC – fathers of the first course in Bremen, who are still with us, such as Messrs. M. Schmidt, W. Fröhlich, F. Steiner, R. Stange, A. Maier, F. Wiener and W. Könemann, were assigned to the ATC units in Stuttgart (12), Nuremberg (7) and München (13) in the US zone and to Bremen (8) in the british zone for OJT in aerodrome control (TWR).

After a period of three months OJT one acquired the visual flight rules (VFR) TWR licence (A for the control of flights under visual conditions) and another quarter-year later the aerodrome & approach control licence (B for the control of flights under instrument weather conditions). AACS area control courses were conducted only two years later. The first area control (ACC) course at Freising from January 1 to February 15, 1951 was followed by another one with german civil and american military attendees from February 25 to May 29, 1952.
Successful participants were assigned to the Frankfurt and Munich centres for OJT. First C-licences for area control were issued at the Munich ACC in June 1952. There, USAF Mj. Ortenburger was the acting chief and being replaced by Mr. H. Kolle in 1953, when BFS took over. Mr. Kolle was also one of the first 40 "Bremen Boys", who started in 1949 and got their ATC licences at Nuremberg and Munich already in March and April 1950. Mr. Schmidt became the first civil TWR chief in Munich in 1951, having replaced Mr. Myers.

Mr. Schmidt was then transferred to Frankfurt ARTCC in 1952 and became its chief controller in 1953. In the following years he was appointed as chief ATC operations for all ATC units at Frankfurt, TWR, APP and ACC. He left BFS in 1964 for assignment with the newly founded European Organization for the Safety of Air Navigation – EUROCONTROL in
Brussels. BFS licence number 1 was issued to Mr. A. Maier in 1956, who acted as TWR chief in Stuttgart, succeeding Mr. Thompson.

During the course of the following years the first “40” transferred to other ATC units in the country. Some joined the new german Luftwaffe and navy or joined Lufthansa. Three of the first 40 had already been dismissed by the CAB before 1953 for reasons of misconduct. And a few joined their colleagues at Frankfurt TWR and RAPCON on Rhein Main airbase. Mr. Don Thompson, the CAB’s TWR chief in Stuttgart at the time, had been airport administrator in Bremen before 1949 and is the only CAB representative still with us today. He was succeeded by Mr. Maier. It could not be confirmed who of the CAB had been the TWR chief at Nuremberg during these years; but probably Mr. Waller. As of 1953 it had been Mr. Strinzel on behalf of BFS.

V. THE AIRSPACE

The former german control areas (CTA) constituted part of the Bad Eilsen, Frankfurt, Munich, Strasbourg and Berlin FIRs. Air traffic services (ATS) were provided in these CTAs in the US zone by the Frankfurt and Munich ATC centres, in the british zone by Bad Eilsen, in the french zone by Strasbourg and in the russian zone by nobody, with the exception of the
Berlin ARTCC, operated by USAF / 1946th AACS unit under jurisdiction of the Berlin air safety centre (ASC), for all flights to and from Berlin being restricted to the three corridors from West Germany.

The airspace available to ATC was limited. In the west of Frankfurt CTA only flight altitudes between 6000 and 14000 feet could be used on airways green-1 / red-10; and to the east of Frankfurt only between 5000 and 10000 feet due to the Berlin traffic.

A division between lower and upper airspace did not exist as yet. This only happened on February 1, 1954 and from thereon air traffic control service was only provided up to 19.000 feet of altitude by BFS. Civil aircraft did not reach higher altitudes anyhow then. This changed with the advent of turbo-prop airliners like Lockheed’s Electra, the british Viscount and Britannia, the C-130, Canadair’s CL-44 Yukon and the russian Ilyushin 18. And as of 1956/57 the appearance of pure jets, like the american Boeing 707, the british Comet and the russian Tupolev 104 and the french Caravelle changed ATC operations completely. Now NATO’s many fighter type aircraft mixed with all these civil aircraft in the upper airspace.

What happened thereafter in the upper airspace of West Germany above 20.000 feet is another story and can be read in the report on the Rhein Control ATC centre. The upper airspace, more or less, had become a “wild west” playground for everybody until 1957, when the Rhein Control centre was set-up by the 619th TCS and the AACS squadron of USAF on Erbeskopf mountain for the control of all civil and military traffic above 20.000 feet over all of South Germany for joint operations by USAF / AACS, BFS and GAF. From June 1957 to September 1960 controllers of the 619th TCS, AACS, GAF and BFS worked there harmoniously in joint teams under command of the 7424th support squadron of USAF, controlling B-57s, U2s, T-33s, F84s, F86s, C-130s, superconnies and the like.

Until that time a differentiation between jurisdiction for the control of civil and military flights had not been made. Everybody controlled any flight. As a result of political aviation development under ICAO and NATO involvement, in autumn 1959 the airspace above 26.000 feet was declared to be uncontrolled on RAF demand and ICAO + NATO decision. From now on only flight (traffic) information was provided to “known” flights up there. Between 1954 and 1957 the air defense units of RACECARD at Freising and CORNBEEF at Birkenfeld had offered a kind of traffic information to non-air defense flights, after fashion, because it was not the objective of air defense to separate flights from each other, but to bring them together.
In September 1960 ATS operations at Rhein Control were taken over completely by BFS, when all AACS staff left to other assignments. The whole facility, however, remained to be USAFE owned and operated until spring 1964.

In the french zone everything took a little longer. Their part of the german airspace remained to be part of the Strasbourg FIR/CTA under french air force command until 1953, reaching out to Friedrichshafen 10°E at Lake Constance; see 1952 map. This FIR covered all of the “Lands” of Baden, Württemberg, Elsass-Lothringen and the Saarland. The ATC centre was located at Strasbourg. During 1953 this FIR was split into two and all of its airspace east of the Rhein river was added to the existing München FIR, only to lose it again to the Frankfurt FIR years later. France had already delegated part of its zone in 1948 to the US and withdrawn almost completely from Rhineland-Palatinate. The Lahr and Söllingen military TMAs remained under FAF command and its two RAPCONs were jointly operated by the FAF and the RCAF until the mid 1960’ies. The airspace above these MTMA above 20,000 feet was declared as danger area and flights operating there came under jurisdiction of Rhein Control.

In the british zone the RAF had established air bases on the island of Sylt (Westerland), at Gütersloh, Wildenrath, Brüggen and Laarbruch in addition to other former german military airfields, such as Wunstorf and Bückeburg. Military terminal control areas existed for all these airfields. The Bad Eilsen ACC handled civil and military flights under air traffic advisory service (ADS, i.e. separation to known, participating flights only) until its relocation to Hannover airport. It was then divided into two colocated units, Hannover ACC/UAC run by BFS and Hannover Military operated by the RAF.

The upper airspace in the north, called Hannover UIR, had the same structure than Frankfurt UIR in the south, with the exception that Hannover Military of the RAF was taken over by the GAF during the 1960’ies and moved to Goch and Uedem under the radio call sign of Lippe Radar. In that UIR now two units at separate locations provided air traffic (control) services separately to civil flights by Hannover and to military flights by Lippe. The RAF from then on handled air defense flights only, besides operating their own RAPCONs and control towers.

In the russian (soviet) zone the three air corridors to Berlin, each 20 statute miles wide, remained unchanged until 1989, with flight altitudes practically limited to 10,000 feet AGL. USAF had been agreed to operate the Berlin ARTCC for flights in all three corridors and the Berlin control zone (CTR), also limited to 10,000 feet vertically. The flights from West
Germany were conducted to the aerodromes of Gatow in the British sector of the city, the ones into the French sector to Tegel and all US flights to Tempelhof in the American sector.

Airspace outside the Berlin CTR and the corridors was used by the Soviet forces, which established a great number of military air bases in their zone, leaving only the CTRs of Berlin–Schönefeld in the Soviet sector of the city, Dresden and Leipzig to INTERFLUG for aerodrome and approach control of civil flights to these airports. INTERFLUG, being an airline, airport operator and civil air navigation administration as one corporation, only had one north/south airway (Amber 7) leading through East German airspace. This air route was mainly used by airlines from Scandinavia overflying Germany to destinations in the south-east of Europe, into Czechoslovakia and beyond.

Civil traffic in East Germany increased only moderately over the years. This and limited air/ground telecommunication facilities available led INTERFLUG to finally operate three small ACCs at Schönefeld, Friedland and Cottbus. Outside these CTRs and the airway only military flights were conducted under control of Soviet air defense and ATC units, in later years in cooperation with the GDRs national peoples army, the NVA.

In 1956 the RAF and USAFE decided to extend the air defense identification zone - ADIZ in the west to the north, all the way to the Baltic sea. Interestingly, the FAF had also implemented an ADIZ after the war in French airspace, west of the Rhein, called peripheral identification line - LIP.
One of the curiosities of mixed jurisdiction over airspace, respectively joint operations by different NATO forces was Moselle Control, located in Metz, France, and operated jointly by the FAF, USAF and the RCAF. Their airspace was declared Military TMA, which also covered most of the Saarland, handling military flights only and serving the air bases of Marville, Gros Tenquin, Phalsbourg, Metz, Etain, Toul, Evreux and Zweibrücken.

Only ICAO’s III EUM conference of 1952 in Paris had brought some order into the meanwhile developed mess of airspace organization and the different types of services to aircraft operators. As a consequence, NATO/CEAC influenced the further development significantly on demand of the RAF, and the allied CAB slowly began to reduce its authority in air navigation matters. It finally terminated its activities in 1956. Another ICAO EUM conference in Geneva in 1958 finally brought order into the west European airspace structure with the BENELUX countries and the UK now providing ATC service to all flights up to 25,000 feet. But airplane technology had overtaken their arrangement with the majority of airline jets now operating above that altitude in now uncontrolled airspace.

1952 ICAO Map with german FIRs and Control Areas – dotted lines = Occupation Zones
VI.
AIR TRAFFIC

The many personnel and material transports of the occupation forces soon required the implementation of air traffic control service due to the often marginal weather conditions. The first re-opened airports were Hamburg (harbour), Bremen (port), Düsseldorf, Frankfurt, Stuttgart, Nuremberg, Tempelhof and Munich. Tegel in the french sector of Berlin, Hannover and Cologne followed. Air traffic between 1946 and 1950 mainly consisted of military transport flights, especially those during the Berlin Airlift to the airports of Gatow (RAF), Tempelhof (USAF) and Tegel (FAF) as well as tactical flights for support of air defense exercises. During the airlift flights returning from Berlin all proceeded through the central corridor to Bückeburg. A few foreign airlines, which as of 1946 wanted to route their flights to and over Germany, had to do so without support by air traffic services. From Bremen and Hamburg civil airports also daily target flights with USAF and RAF aircraft took place into the danger area of Todendorf-Putlos. The first large NATO air exercise took place in the first years of the 1950’ies under the code name of OPERATION CIRRUS.

In the soviet zone all air transport jurisdiction remained with the soviet forces for many years. After the establishment of the German Democratic Republic pre-war Lufthansa, years later, became INTERFLUG, which was then also responsible for the east-german civil ATC units.

Nuremberg airport opened for traffic only on January 1, 1950. A control tower at the old Nuremberg “Industry” – Airport had not existed in the beginning and therefore aerodrome control was provided from a wooden shack on top of the roof of the terminal building. The present Nuremberg airport is about 1,5 km away from the former location.
VHF voice radio channels at that time were a non-existent luxury. However, the air forces already applied voice radio communication on VHF and UHF frequencies. Most towers also operated on HF 3270 kHz. It was the decennium of the C-46, C-119, C-124, DC-3, B-337, DC-4, IL-14, JU-52 and Bristol, i.e. the pre-turboprop generation of transport aircraft. A DC-6 or Lockheed Constellation were seldom guests on airports at that time.

Unusual side-jobs for the controllers were additional tasks as marshaller on the apron or as load master, respectively as acting airport administrator. Such duties normally lasted only for one week per month. Here and there controllers were also asked to calculate obstacle clearances for the approach sectors to runways; not an easy job, because available maps of Bavaria still used the “bavarian land mile” as reference, measured from the tower of the “Frauenkirche” downtown Munich. Now, one had to recalculate every figure onto the Greenwich coordinate system.

In the Frankfurt CTA in summer of 1954 about 300 instrument flight movements took place daily in the average. This constituted an increase of 63 % against the previous year. About 38 % of these flight movements were regular flights of airlines. Circa 47 % of all instrument flights were courier and liaison flights of military units, such as AIREVAC, MATS, USAF, US
Army and Navy, RCAF, etc. The remaining 15% constituted non-tactical training flights, so-called “round robins” of the various military flying squadrons. These should frequent the upper airspace in later years by the hundreds. The many tactical flights with fighter type aircraft from and to fighter bases did not show up with the ARTCCs in the lower airspace. There, they remained under RAPCON control or with air defense units or flew completely uncontrolled. Real hectic became ATC only in the years after 1955 by the advent of turbine powered tactical jet and airline transport aircraft; and increased flying activity of the NATO forces with over 2000 military high performance aircraft stationed in the FRG at 47 air bases, 22 of which were located in south Germany. It was the time when the “Cold War” became real cold.

VII

CONCLUSION OF THE FOUNDERS

In a report of Frankfurt ARTCC of July 1954 by Mr. Moore, now director with the airways and training department of the CAB, it says: “Despite the unpleasant working conditions in the ATC service the german control services by judgement of various airlines as regards orderliness and safety as well as the expeditious handling of the traffic flow within Europe, including the UK, is by far leading. This is not the only commendable judgement on german air traffic control service, and when its staff within the last two years managed, often up to and beyond its physical capacity, to acquire such excellent reputation, it becomes doubtful these days, if we will be able to keep up this reputation in the future.” He continued, saying: “The reported conditions in ATC in its present form are neither professionally nor physically bearable and cannot be permanently tolerated. As a solution at least the weekly working hours must be reduced radically to a maximum of 38 hours per week.”

Messrs. G. Waller, Don Thompson and Charles Myers – 1999

“We certainly liked you!”
So, already in 1954 warnings were voiced. But the further development was different and is probably known to many controllers reading these lines. With Rhein Control, for instance, BFS in 1960 increased weekly working hours from 32 to 45 in reducing the manpower considerably at the same time, because all leaving AACS controllers could not be replaced and GAF controllers were suddenly no longer permitted to perform C-controller functions. The consequences are known and will not be forgotten by this generation.

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