CHAPTER 4: CHRONOLOGY 1957-1966

1957

Global Weather Central (GWC) began using SAC’s IBM 704 computer.

7 Jun

First AWS Commanders’ Awards presented.

17 Jun

Task team convened at HQ AWS in first AWS-wide look at centralizing terminal forecasts. The team’s final report, issued 12 August 1957, recommended a test centralized forecast facility at Tinker AFB. The site subsequently changed to AWS’ Severe Weather Warning Center SWWC), Det 25, 6WS (Mobile), at Kansas City, where a pilot program began forecasting for five terminals on 1 November 1957. The facility merged with SWWC (subsequently referred to as Severe Weather Warning Facility) to form Kansas City Centralized (Terminal) Forecast Facility, (formally Det 4, 4WG) which, on 15 May 1958, issued official (advisory only, not obligatory) forecasts for the first block of 12 (number rose to 35 by January 1959) AWS detachments at Air Force and Army bases in central U.S.

Jul

Weather IBM 701 computer at JNWP replaced with IBM 704.

Sep

AWS began weather reconnaissance support of SAC and TAC air refueling areas.
In connection with U.S. Weather Bureau’s National Hurricane Research Project (forerunner to Project Stormfury which got underway in 1956 and to which AWS provided TB-50 support), AWS (55WRS) assigned a B-47.

11 Dec USAF Weather Central at Suitland closed and its functions and resources combined with GWC (formally Det 1, 3WW) at Offutt AFB. In the vacated space at Suitland, AWS united its Washington-area Climatological functions into what became referred to as the Climatic Center (formally Det 3, HQ AWS).

1958

Jan-Mar First AN/GMD-2 rawin sets tested at Andrews AFB.

Mar U.S. Weather Bureau’s National Meteorological Center commenced operation at Suitland.

23 Jun HQ AWS moved from Andrews AFB to Scott AFB.

Two, two-man offices created to fill AWS’ liaison need in Washington area. They were the Office of the Assistant for Weather with the Air Staff’s Operations staff agency (AWS had actually maintained a liaison officer in Pentagon since September 1955) and the AWS Washington office.

1 Sep Twenty-five master sergeants were the first in AWS (nine with weather Air Force Specialty Code (AFSCs)) promoted to new grade of E-8 (senior master sergeant). None of the promotees were WAFs with weather AFSCs.

Figure 4-2: AWS assigned 55WRS WB-47 to National Hurricane Research Project

Figure 4-3: AN/GMQ-13 Cloud Height Set, ML-506 Projector (L), IP-327 Indicator (C), and ML-507 Detector (R); more frequently referred to as Rotating Beam Ceilometer (RBC) because of the rotating light beam technology used in the projector.
22 Oct While joint Army Regulation 115-10/Air Force Regulation 105-3 of 31 March 1949 was under revision, Air Force issued guidance for Army weather support establishing Air Force responsibility for providing, installing, and maintaining weather equipment at Army installations. The Army was made responsible for providing, installing, and maintaining weather communications equipment.

31 Dec Most of new AN/AMT-6 dropsondes and related equipment delivered to AWS weather reconnaissance units.

1959

In 1959 First AN/GMQ-13 Cloud Height Set installed.

15 Feb USAF strategic facsimile net established connecting GWC with other weather centers and facilities stateside.

24 Feb At Air Force’s request, AWS forwarded first formal statement of requirements for meteorological satellite data.

1 May Joint (Navy-Air Force) Typhoon Warning Center established at Navy’s Fleet Weather Central facility, Nimitz Hill, Guam.

15 May Due largely to AWS’ initiative and preparation, MATS participated in operational test of numerical flight plans produced by JNWP IBM 704 computer. On 14 December 1959 MATs directed AWS to set up an operational system.

Jul First AN/FMS-3 sferics equipment received by AWS.

8 Jul First two weather squadrons (7WS at Heidelberg AI, Germany, and 16WS at Ft Monroe, Virginia) activated for exclusive support of Army.

1 Oct AWS Regulation 55-3, “AWS Centralization Program,” published. It established AWS policy, including that of making Kansas City Centralized (Terminal) Forecast Facility forecasts obligatory, with a few exceptions, for local terminal use after a three-hour period.

1 Dec Four Senior Master Sergeants (Leonard S. Grisham, 25WS; James T. Hastings, 33WS; and Jerome

Figure 4-4: Interior of Kansas City Centralized (Terminal) Forecast Facility showing, left to right in foreground, SMSgt Frank Brzeczek, Lt Col James Bunce, Lt Col Robert Miller, and Maj Neil Gardner. In background CMSgt Claborn Gibson, and 1Lt Douglas Fenn.
D. Rhodes and George E. Sheldon, 9WRG) are first from AWS promoted to grade of E-9 (Chief Master Sergeant).

15 Dec  Naval Aerological Service first established on permanent basis in 1919, redesignated as Naval Weather Service.

1960

8 Feb  Data Control Division of AWS’ Climatic Center (Det 3, HQ AWS) at Asheville redesignated Data Processing Division.

18 Mar  AWS finished placing all its weather reconnaissance units under control of 9th Weather Reconnaissance Group (9WG), Scott AFB (moved to McClellan AFB, California, in 1961 and redesignated 9th WG until 8 July 1965, when it became 9th Weather Reconnaissance Wing (9thWRW)). It was the first time since 1951 that all weather reconnaissance operations were supervised by one field unit headquarters.

1 Apr  The RCA-built TIROS 1 (Television Infrared Observation Satellite), the world's first meteorological satellite, is launched from Cape Canaveral, Fla., atop a Thor launch vehicle.

May  AN/TPQ-11 weather radar installed at Cape Canaveral, FL, for Category II and III testing.

1 May  U-2 piloted by Francis Gary Powers shot down over Russia. U.S. originally denied Russian claims that aircraft was a “spy” plane, maintaining it inadvertently drifted off course while on a “weather reconnaissance” or “weather research” mission with NASA (National Aeronautics and Space Administration) and AWS instrumentation aboard. Powers’ ill-fated flight originated from Peshawar, Pakistan, although the pilot was based at Incirlik AB, Adana, Turkey. U.S. later admitted U-2s flew intelligence-gathering missions over Russia. CIA director Allen Dulles said weather conditions, not political considerations, were the primary determining factor in scheduling U-2 flights.

Ostensibly, Powers’ U-2 belonged to Weather Reconnaissance Squadron Provisional #2—one of three such squadrons organized and attached to HQ AWS in 1956 to “obtain high-level meteorological data in conjunction with the NACA (National Advisory Committee for Aeronautics),” the forerunner of NASA. AWS provided logistical and technical support to the NACA/NASA marked U-2s, aboard which, among other gear, was the AN/AMQ - 7 temperature-humidity measuring system. AWS and NACA/NASA interests were secondary to U-2’s primary intelligence-gathering mission.

20 Jun  Air Research and Development Command’s Air Force Ballistic Missile Division published AFBMD Regulation 80-6, “Staff Meteorological-Geophysical Services.” It was the first clear delineation of AWS staff meteorologist’s responsibilities and organization.

27 Jun  AWS Regulation 105-1, “Weather Modification,” published. It was the first directive addressing subject.
Jul IBM 7090 computer installed at Joint Numerical Weather Prediction Unit. It replaced the IBM 704.

Jul HQ AWS established in-house the “Advanced Systems Program” for monitoring development of new weapons and command-and-control systems (such as B-70, Dyna-Soar, SAMOS, MIDAS, etc.). Program instituted because AWS believed previous weapons and command-and-control systems (F-102, B-47, B-58, Matador, SAGE [Semi-Automatic Ground Environment], etc.) development had not taken into account environmental factors. HQ AWS appointed “Advanced System Project Officers” for each Air Force weapons system then under development. Twelve years later, with publication of AWS Regulation 800-2, HQ AWS established a program with a charter identical to that of the defunct Advanced Systems Program.

1 Jul HQ AWS’ Det 3, the Climatic Center, inactivated and 2150th Air Weather Squadron, HQ AWS, established in its place at Washington DC, designated the Climatic Center USAF.

26 Aug AWS formally proposed establishing Air Force weather satellite system.

24 Oct After SAC determined in 1959 that GWC could no longer share its IBM 704 computer, Air Force approved AWS’ request for new IBM 7090 computer, which became operational at GWC.

Nov IBM 1401 computer installed at GWC to transfer data in and out of IBM 7090.

22 Dec Hq MATS gave EASTAF (Eastern Transport Air Force) responsibility for the numerical (computer) flight plan program AWS had inaugurated earlier.

1961

3 Feb SAC’s KC-135 Looking Glass Airborne Command Post (ABNCP) began continuous airborne operations, with additional back-up airplanes on 15-minute ground alert. The airborne command post sortie was airborne safely and continuously until 24 July 1990. Operation LOOKING GLASS “mirrored” ground-based command, control, and communications located in the underground command center at SAC headquarters, Offutt AFB, NE. It provided command and
control of US nuclear forces in the event that ground-based command centers were destroyed. AWS provided launch and recovery support from Offutt base weather station and on orbit strategic weather products from AFGWC.

1 Mar Among 45 master sergeants in AWS selected for promotion to E-8 was Olive M. Folze of HQ AWS, the first WAF in AWS to obtain the grade of E-8.

16 Mar U.S. Weather Bureau’s SELS (Severe Local Storm) unit at Kansas City assumed from AWS’ Severe Weather Warning Facility responsibility for preparing preliminary severe weather outlooks and severe weather warning advisories and amendments.

Jun Under Air Force’s single manager concept for support aircraft, AWS field units transferred their support aircraft (mainly C-47s and C-54s) to host bases.

21 Jun Under Secretary of the Air Force Joseph V. Charyk, also head of the National Reconnaissance Office (NRO), created an “interim” meteorological satellite program for the NRO with the goal of first launch in 10 months – this was the conception of the Defense Meteorological Satellite Program (DMSP).

27 Jul Col Harry Evans, Deputy Director of the Office of the Secretary of the Air Force for Special Projects (SAFSP), “appointed Lt Col Thomas O. Haig the first director of the DMSP. Haig, a meteorologist and electrical engineer, accepted the assignment on condition that he would not have to use the resident ‘systems engineering and technical direction’ contractor….” – the birth of DMSP.

Jul-Dec AWS submitted QOR (Qualitative Operational Requirement) to Air Force for mobile tactical meteorological van (subsequently designated AN/MMQ-2) for use as representative observing site to support tactical operations.

1 Jul 2150th Air Weather Squadron (a named activity designated as Climatic Center, USAF) HQ AWS redesignated 1210th Weather Squadron, HQ AWS, Washington, DC.

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2 Hall, op. cit. p. 1. In addition, Art., McCormack, Noel A., The Rescue of Apollo 11, Ctr. for the Study of National Reconnaissance, un-dated, p. 1, identified the DMSP weather satellite program had a succession of numeric and alphabetic names, including Program II, P-35, 698BH, 417, and Defense Systems Applications Program. In order to avoid confusion, this chronology uses the designation of DMSP throughout.

3 Ibid., p 2
Aug  Air Force expanded AWS’ mission by designating AWS the Defense Department single manager for aerial sampling as of 1 April 1962. With this expansion, AWS gained unique B-57 and balloon sampling capability with associated helicopter (six CH-21s) recovery activity.

1 Nov  World’s first official clear air turbulence forecast issued by AWS’ Kansas City Centralized (Terminal) Forecast Facility.

9 Nov  First duplicate precision-approach weather-observation facility (weather instrumentation at both ends of runway) installed at Suffolk County AFB, NY.

27-29 Dec  Responding to PACAF (Pacific Air Forces) and Thirteenth Air Force requests, initial cadre of 23 AWS personnel deployed to Republic of Vietnam (RVN).

1962

20 Mar  Russia launched recoverable satellite which, among other missions, investigated “the distribution and formation of cloud patterns.”

22 May  AWS directed to implement a USAF meteorological rocket (rocketsonde) network. First simultaneous four station rocketsonde firing occurred 7 November 1962.

23 Aug  Second launch of DMSP satellite was successful. Launched into a sun-synchronous 450 nautical mile circular polar orbit, the RCA television system provided 100 percent daily coverage of the Northern Hemisphere at latitudes above 60 degrees, and 55 percent coverage at the equator. Readout of the tape-recorded pictures was planned to occur on each pass over the western hemisphere; at the ground stations, the video pictures of cloud cover over the Eurasian landmass was relayed to the Air Force GWC. Weather pictures of the Caribbean returned by this vehicle later in October proved crucial during the “Cuban Missile Crisis,” permitting effective aerial reconnaissance missions and reducing the number of aerial weather reconnaissance sorties in the region.⁴

⁴ Ibid., p. 4 and 5.
28 Aug  COMET (CONUS-Continental United States--Meteorological Teletype) system implemented with automated weather relay center at Tinker AFB.

Oct  First AWS solar forecast issued by HQ AWS.

22 Oct  First WC-130B configured for atmospheric sampling delivered at AWS.

23 Nov  A six-ship flight of C-130s from the 322 Air Division and a four-member team of two weather observers and two forecasters arrived in New Delhi India to assist India with their border conflict with China. The weather team from Det. 17, 31<sup>st</sup> WS, 2 WW, Evreux, France, led by Lt Fred Scheeren, supported re-supply missions to the Indian forces in the high Himalayas for the first 60 days. The forecasters operated out of New Delhi while the observers spent the entire time at Leh airstrip. They, along with a couple of Combat Controllers, were the only American forces based there with the shooting war going on only a few miles away. At 11,000 feet elevation, the Leh airstrip was a “rough dirt gash cut out of a barren flat spot in the mountains. It was a perfect place to demonstrate the capabilities of the Hercules C-130.” Dubbed Operation LONG SKIP, other 2<sup>nd</sup> WW units provided support until the end of the effort on 31 Aug 1963.  

4 Nov  U.S. detonated a 1.59 megaton yield nuclear warhead at 69,000 feet altitude near Johnston Island, 717 miles west south west of Hawaii. Called Operation FISHBOWL, it was part of a bigger operation called DOMINIC I. This test was regarded as the last true US atmospheric nuclear test. AWS provided 10 WB-50 reconnaissance aircraft and positioned 6<sup>th</sup> WS (Mobile) rawinsonde units at Johnston, Palmyra, Christmas, Malden, and Tutuila islands. The Central Pacific Forecast Center, located at Kunia, Hawaii, issued mission control forecasts and the base weather station at Hickam briefed various air crews supporting DOMINIC operations.

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6 E-mail, Scheeren, Frederrick A., Lt Col, USAF Ret., to George Coleman, India Saga, 22 Oct 2011

7 Dec  Air Force ordered Inspection function withdrawn from all MATS wings and groups, and centralized, in AWS’ case, at HQ AWS.

1963

1 Mar  AWS implemented WBAWS (Weather Briefing Advisory and Warning System) whereby 26 stateside detachments provided severe weather warning service to Air Force and Army installations within specified geographical areas.

20 Mar  First of 34 WB-47Es (equipped with AN/AMQ-19 meteorological system) delivered to AWS.

2 Apr  The Joint meteorological Group, JCS, agreed to develop weather support concepts for WWMCCS (World-Wide Military Command and Control System).

1 May  1210WS, HQ AWS, at Washington, DC, reassigned to 4WG at Andrews AFB. The squadron commander also served as Director, Climatic Center, USAF.

31 May  IBM 7090 computer at GWC converted to IBM 7094 purchased in January 1964 for $2,442,160.

Jun  Air Force awarded contract under Project 433L to Hamilton Standard for 58 AN/MMQ-2s and associated tactical equipment (AN/GVN-1 night visibility set, AN/TMQ-14 ceilometer, AN/TMQ-15 wind set, and AN/TMQ-20 temperature-humidity set). First AN/MMQ-2 installed in RVN on 1 July 1966, but AN/MMQ-2s subsequently proved unsatisfactory for tactical operations.

Jul  DMSP transferred satellite ground tracking and readout from Lockheed to blue-suit manned tracking stations in Maine and Washington. At the same time, a command and control center
for DMSP manned by SAC personnel [SAC’s 4000th Support Group] began operating one floor below AFGWC in Building D, Offutt AFB, NE. (Hall, p7) When the ground stations were assembled, the program office developed a sun tracking technique to determine an antenna’s pointing vector and receiving system sensitivity during operation. This eliminated a costly “bore sight tower.” AWS would employ this sun tracking technique in the late 1970’s as standard operating procedure to measure the AN/FPS-77 Storm Detection Radar tracking accuracy.\

22 Jul AWS transferred responsibility for clear air turbulence forecasts from Kansas City Centralized (Terminal) Forecast Facility to 3WW forecast centers at March and Westover AFBs.

20 Aug First operationally ready APT (Automatic Picture Transmission) weather satellite readout installed at Offutt AFB and operated by 3WW.

15 Sep AWS transferred responsibility for terminal forecasting from Kansas City Centralized (Terminal) Forecast Facility (Det 42, 8WG) back to respective detachments and, due to dissatisfaction with the service of U.S. Weather Bureau’s SELS Unit, established a Military Weather Warning Center (MWWC) at Kansas City responsible for severe warning function of the 26 WBAWS detachments.


1964

Jan Department of Commerce established office of the Federal Coordinator for Meteorological Services and Supporting Research (commonly referred to as OFCM). Headed by U.S. Weather Bureau chief, under which were two committees: ICMS (Interdepartmental Committee for Meteorological Services) and ICAMR (Interdepartmental Committee for Applied Meteorological Research).

8 May Six CH-21s associated with AWS’ balloon sampling activity assigned to the 59WRS, which was inactivated 8 May 1964 when AWS consolidated all balloon support activities under Detachment 1 of 4WG’s 6WS (Mobile), and two other aircraft transferred to Air Rescue Service.

18 Jun First of 19 RB-57Fs delivered to AWS. Unit cost approximately $1.5 million.

13 Aug IBM 7040 computer installed at Climatic Center, USAF.

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9 Personal reflection of Coleman, George N. III, CMSgt, USAF, Ret., based on experience in the late 70s as AWS added emphasis to radar operations.
15 Aug  AWS transferred responsibility for clear air turbulence forecasting from 3WW centers at March and Westover AFBs to GWC.

31 Aug  Solar forecasting function transferred from HQ AWS to 4 WW, Ent AFB, Colorado.

16 Oct  US detected first Communist Chinese nuclear test, initially by acoustic and 11 electromagnetic stations. It was subsequently confirmed by airborne particulate sampling conducted by AWS WC-130, WB-50, and WB-57 aircraft from Yokota AB, JP; Wheelus AB, Libya; Eielson AFB, AK; and McClellan AFB, CA.\textsuperscript{10}

26 Oct  First production-model AN/TPQ-11, Radar Cloud-Detecting Set received. The TPQ-11 was a vertical-pointing, two-antenna, K\textsubscript{a}-band, system for detecting, displaying, and recording the density and height of clouds and precipitation directly above the set. A continuous height-time record was produced on a permanent facsimile record. The set provided information concerning the existence of cloud layers above a low stratus or fog deck, shear layers, sharp intensity gradients in thunderstorm clouds, the slope of advancing precipitation, and low-level temperature inversions.

4 Nov  First AN/FPS-77 Radar Meteorological Set delivered to Griffiss AFB, New York, for Category II and III testing. The FPS-77 was a C-band search radar that eventually replaced the X-band AN/CPS-9 Radar Set.

15 Dec  Climatic Center, USAF, Washington, DC, redesignated Environmental Technical Applications Center (ETAC), USAF. It remained assigned to 4WG’s 1210WS.

1965

In 1965  AWS special warfare weathermen deployed to South East Asia (SEA) theater of operations. Members of 2WG’s Detachment 75, worked clandestinely in Laos, under dangerous conditions and on a nearly uninterrupted basis, to establish and maintain, a weather observing and reporting net essential to combat air operations.

18 Mar  First DMSP weather satellite launched that could be “…programmed to record and readout specific weather data in Southeast Asia to support tactical operations in the theater.”

“tactical” ground station was set-up at Tan Son Nhut, RVN. “It furnished…complete cloud-cover data for North Vietnam, South Vietnam, and parts of Laos, China, and the Gulf of Tonkin.”

14 Apr First C-130E picked up at factory (Lockheed, Marietta, Georgia) and delivered to 53WRS. Air Force Logistics Command subsequently modified the aircraft to WC-130E configuration.

22 Apr Two C-135Bs transferred from MATS to AWS, the first of 10 eventually modified to WC-135B configuration. The tenth WC-135B was received 21 January 1966.

1 Jul Automated Weather Network (AWN) operational. It linked weather centrals at Fuchu AS, Japan, and High Wycombe, England, and GWC with high-speed weather communications link via Tinker AFB switch.

Jul Col. John E. “Jack” Kulpa became the new [DMSP] Program Director and initiated work on the next series of satellites, DMSP Block 5. He delegated instrument requirements and design of the spacecraft to Capt Richard Geer and Maj James Blankenship. A career weatherman, he “played a predominant role in the payload design that made Block 5 especially user-friendly, such as formatting of the imagery to standard AWS weather chart scales…. He possessed excellent long-range vision, seeing data applications, technology solutions, and political ways and means far into the future. His expertise in weather phenomenology, his aggressive attitude, his persuasiveness, and a unique [NRO

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1 Hall, *Op. cit.*, p. 14. In previous studies 10 Sep 1965 was used as the “First DMSP launch.” Hall’s document does list a Sep launch but it was not the first DMSP launch. In addition, AFGWC had been receiving satellite data from DMSP since “flight number three launched on 19 Feb 63.” p.7.
access via the AWS] . . . combined to make him arguably the most powerful person in the SPO [system program office].”

1 Jul At direction of MATS, AWS manpower and organization function and its 29 manpower spaces transferred to HQ MATS to man Management Engineering Team (MET)-1.

13 Jul U.S. Weather Bureau became component of Commerce Department’s newly formed ESSA (Environmental Science Services Administration).

1 Sep First day of continuous operation of AWS’ SOFNET (Solar Observing and Forecasting Network), as reported by AWS solar observers and forecasters at Athens, Sagamore Hill, Sacramento Peak, Hawaii, and Manila.

14 Sep Last AWS WB-50D departed Yokota AS (56WRS) for eventual storage at “boneyard,” Davis-Monthan AFB, Arizona. In 10 years with AWS, WB-50Ds experienced 13 accidents, killing 66 crewmen.

8 Nov Univac 418 computer for AWN installed at GWC. Effective 1 June 1967, when low-speed teletype input to ITT 7300/ADX was terminated, UNIVAC 418 became sole data source for GWC.

22 Nov GWC began transmitting six analysis and forecast maps twice daily to Fuchu and High Wycombe centrals over AWN.

26 Nov AWS mission regulation expanded to include weather modification.

16 Dec Pathet Lao forces attacked and overran Lima Site 169 at Pan Pha Thuong, Laos. A1C Wilder of 2nd WG’s Det 75 was the only American there and barely escaped. A full-scale rescue attempt was initiated by the air attaché at Vientiane, Laos, and, after 36 hours evading the enemy, Wilder was pulled from the jungle by helicopter.

Note, Grimes, Keith, Col, USAF, AFWA Historical Files. [Note was prepared as an explanation of a photograph showing MSgt Watson and A1C Wilder dressed in distinctive air commando bush hats.]

1966

In 1966 The National Reconnaissance Program Committee on Imagery Requirements and Exploitation (COMIREX) adopted World Aeronautical Grid Cells (WAG Cells) as a single standard. Each WAG Cell was a uniform 12 by 18 nautical miles on a side around the world. An intelligence

12 Ibid, p.18

13 Note, Grimes, Keith, Col, USAF, AFWA Historical Files. [Note was prepared as an explanation of a photograph showing MSgt Watson and A1C Wilder dressed in distinctive air commando bush hats.]
operator thereafter submitted target requests to COMIREX identified by WAG cell location and sorted by ephemeris—whichever satellite orbital trace crossed a particular WAG Cell and at what time. In the meantime, AFGWC began work on a three-dimensional cloud analysis program. It merged all overhead imaging and civilian weather reports into a global cloud analysis with a spatial resolution of 25nm on a polar stereographic grid, by date and time of day. By the late 1960s, AFGWC could estimate the probability of cloud-free access on any day and time throughout the year for any required target.14

1 Jan MATS redesignated Military Airlift Command (MAC) with no change in status of AWS.

17-19 Feb Na Khang, Laos (Lima Site 36) was overrun by Communist forces.15 MSgt Watson, a “commando” weather person of 2nd WG’s Det 75, was part of the friendly forces that abandoned Lima Site 36 when it came under heavy mortar attack. Watson was able to salvage a theodolite and some basic observing gear, but the AN/GMQ-1 wind-measuring set was destroyed. In conjunction with ground fighting, USAF air strikes reduced the site to charred remains.16

31 Mar Using dry ice with tethered balloons, AWS conducted its first operational test of dissipating cold fog. The tests were deemed inconclusive.

1 Apr Solar Forecast Facility (Det 7, 4WW) established at Ent AFB, Colorado. It was charged with operating SOFNET and a Solar Forecast Center within the NORAD (North American Air Defense Command) Space Defense Center in Cheyenne Mountain complex near Colorado Springs, CO.

17 May Solar-geophysical teletype network became operational.

8 Jul To support widening U.S. combat effort, AWS expanded its SEA organizational posture from a squadron to a group and three squadrons.

4 Aug First AN/TKR-1 transportable weather satellite receiving station [APT] accepted. This receiver provided selected fixed base and deployed weather units the ability to receive TIROS weather satellite images as the satellite traversed within the reception footprint of the unit’s location. While DMSP was making history in the classified environment, the APT images


spearheaded the growth of weather satellite analysis techniques for use in daily weather operations. One such location was the Central Pacific Forecast Center (Detachment 3, 1WW), Hawaii.\(^7\)

**26-30 Sep**  First AN/FMN-1 for computing RVR (Runway Visual Range) installed at Westover AFB, MA.

**7 Oct**  Air Force approved installation of advanced computers at GWC, Offutt AFB, NE.

**7 Nov**  First major RB-57F accident. A 58WRS RB-57F crashed into Sandia Mountains approximately ten miles from Kirtland AFB, NM, killing both crewmembers.

**11 Nov**  World’s first magnetometer network established by AWS.

**16 Dec**  AWS Solar Forecast Facility (Det 7, 4WW) began mapping ionosphere.

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Figure 4-18: In what would have been a classic pose for a Bill Mauldin “Willy-and-Joe” cartoon of WW II fame, whisker stubble, cigar-smoking Sgt Michael Connell, a 39 year-old “lifer” from Loving, NM, assigned as a combat weather team chief to OL-2 of 5WS’ Det 31 at Phuoc Vinh, wearing a helmet with the words “lover not fighter” scrawled over its burlap camouflaging, squints into the hot Vietnam sun one day in 1968. “We get a very deep sense of satisfaction working with the ‘Cav,” he was quoted when asked how it felt being stationed with the 1st Cavalry Div (Airmobile) in ‘Nam,” “because it is a division noted for its success against the enemy” and “the information we obtain and pass on plays a vital role in the planning of each operation.”

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\(^{17}\) Personal reflection, George N. Coleman III, CMSgt, USAF, Ret., of events as they developed while assigned to Det. 3, 1WW from 1966-1969.