COMMANDERS

OF

AIR PHOTOGRAPHIC AND CHARTING SERVICE

Brig. Gen. (then Col.) Brooke E. Allen*	1 April 1951 - 24 September 1952
Brig. Gen. Edwin M. Day	24 September 1952 - 28 February 1958
Col. William S. Barksdale, Jr.	1 March 1958 - 20 March 1958
Maj. (then Brig.) Gen. Clifford H. Rees**	20 March 1958 - 31 July 1962
Brig. Gen. Robert W. Hall	1 August 1962 -

*Promoted to Brigadier General on 9 October 1951.

**Promoted to Major General on 1 July 1961.

CHRONOLOGY

1 April 1951	Establishment of the Air Pictorial Service (APS) at Washington, D. C., under direct control of the Chief of Staff, USAF.
27 November 1951	Headquarters APS moved from Washington to Philadelphia, Pa.
16 April 1952	APS redesignated as the Air Photographic and Charting Service (APCS) and assigned to MATS.
11 May 1952	Aeronautical Chart and Information Service (ACIS) transferred from Air Materiel Command to MATS, and then reassigned to APCS.
August 1952	ACIS redesignated Aeronautical Chart and Information Center (ACIC) on 1 August 1952.
	Hq ACIC moved from Washington to St. Louis, Mo., on 13 August 1952.
7 December 1952	Headquarters APCS transferred from Philadelphia to Orlando AFB, Fla.
1 May 1954	APCS assigned USAF photo-mapping and electronic surveying responsibilities.
	(SHORAN, which later became HIRAN, Geodetic Mission was transferred from SAC to MATS, and then assigned to APCS, at about the same time.)
May 1955	APCS assumed general monitorship of the NCO Academy (MATS).

February 1956-September 1958	AFCS was directed by Headquarters USAF to assume responsibility for missile-site survey. Since the number of geodesists in the Air Force was then limited, the Command, through contract, arranged for its initial assignments to be carried out by teams from the US Coast and Geodetic Survey. Gradual enlargement of this phase of its mission led to the establishment of Operating Location 1, 1370TH Photo-Mapping Group, at Orlando Air Force Base, on 27 March 1958. Although this OL was attached to Headquarters AFCS for operational control, monitorship of the unit was exercised by the Aerial Survey Division of DCS/Operations. In September 1958, this OL was replaced by Operating Location 1, 1373d Mapping and Charting Squadron. which later provided logistical support for it.
November 1957-May 1958	Integration of the ZI regional film exchanges into a central operating facility at St. Louis, Mo., under the 1356th Film Library Flight, was completed in the course of this period.
July 1958	Responsibility for giving photographic support to missile divisions in ARDC test firings and in SAC training and operational launchings at Vandenberg Air Force Base, Calif, was assigned to AFCS in the summer of 1958. This phase of its mission was delegated to the 1352d Motion Picture Squadron, which organized an operating location at Vandenberg (then Cooke AFB) on 11 July 1958.

August-November 1958	Additional photographic documentation of AF missile launchings at Cape Canaveral, Fla., was made a requirement of APCS. Service of this type, on a small scale, had been furnished for some time. However, on 1 November 1958, an operating location of the 1365th Photographic Group was organized at Patrick AFB, Fla., to meet this requirement.
1 January 1959	Air Force Film Library Center was established at St. Louis, Mo., for conduct of AF film-library activities in the United States and overseas areas. This authorization of a name for the operational phase of the 1356th Film Library Flight emphasized the recent consolidation of its exchange function and indicated more exactly the character of the service rendered. Since the Flight would continue to provide administrative servicesfor the entire organization, the designation of the unit as a whole was not affected by this action.
1 February 1959	Detachment 1, 1352d Motion Picture Squadron, was organized at Vandenberg AFB, Calif, to meet the growing demand for photographic coverage of missile activities at that base. (Concurrently, OL 1, 1352d MP Squadron, in service there for the previous six months, was discontinued.)
Mid-February 1959	Announcement of the inactivation of Palm Beach AFB, Fla, in early 1959, led to transfer of the 1370th Photo-Mapping Group and five of its squadrons from that installation to Turner AFB, Ga., in mid-February of that year.* Since facilities for the Group's photographic laboratory were not then available at the new station, this function was retained at Palm Beach AFB, as an operating location of the 1373d Mapping and Charting Squadron, until the fall of 1961.

*An additional component, the 1375th Mapping and Charting Squadron, was activated at Turner, prior to the transfer.

1 April 1959	Detachment 2, 1352d Motion Picture Squadron, organized at Ent AFB, Colo., to provide photographic documentation for missile bases being constructed in the north-central and northwestern United States. This unit also would cover events at the Air Force Academy.
1 July 1959	The expanding workload and complexity of missile-site survey operations led to replacement of OL 1, 1373d Mapping and Charting Squadron, by the 1381st Geodetic Survey Squadron (Missile), organized at Orlando AFB on 1 July 1959. The mission of the newly established unit consisted in the performance of geodetic, astronomic, and gravity surveys on a worldwide basis.
10 July 1959	As a means of furnishing better photographic service to Headquarters, Pacific Air Forces, the 1362d Photographic Flight was transferred from Yokota AB, Japan, to Hickam AFB, Hawaii. Concurrently, a detachment of the 1362d Photographic Flight was established at Yokota, to provide documentary photographic coverage in Japan and neighboring areas.
1 January 1960	Due to expansion of its mission, the 1370th Photo-Mapping Group was redesignated as a Wing. During the next few months, some organizational changes within the unit also were made.
1 April 1960	As a result of negotiations between APCS and Alaskan Air Command, transfer of the Alaska Branch Film Library, at Elmendorf AFB, to direct operational control of the Air Force Film Library Center was effected on this date. The newly acquired facility, redesignated as the Air Force Film Library (Alaska), became a detachment of the 1356th Film Library Flight (later Squadron).* This action reflected the trend toward establishment of a closer relationship between the AFFLC and regional libraries--as a means of furthering prompt distribution of films and wider use of associated audio-visual aids.

*Change of designation from Flight to Squadron was effected 1 July 1960.

1 April 1960

Continuing requirements for a geodetic surveying capability at Vandenberg Air Force Base led to organization of Detachment 1, 1361st Geodetic Survey Squadron (Missile) at that installation.

April-July 1960

In order to realign and standardize its photographic units and to reduce the number reporting directly to its headquarters, APCS--with the approval of Headquarters, MATS--undertook reorganization of these components. In broad terms, the basic still and motion-picture capacity of APCS would, after 1 July 1960, consist of two large photographic squadrons--the 1365th, at Orlando AFB, servicing the eastern United States and Europe; and the 1352d, at Lookout Mountain Air Force Station, meeting the needs of the western half of the country and the Pacific area. Detachments of these units would document missile activities at Cape Canaveral and Vandenberg AFB, while other elements, strategically stationed around the globe, would aid in the fulfillment of their mission.

APCS responsibility for the Aeronautical Chart and Information Center was transferred to Headquarters USAF, effective 1 July 1960.

As a result of the pending realignment of photographic units, the expansion of geodetic-survey and photographic activities, and the forthcoming transfer of ACIC, a number of changes were made in the Office of DCS/Operations, Headquarters APCS, in April 1960. Included in the reorganization were the following actions:

a. Redesignation of DCS/Operations as DCS/Geodesy and Cartography.
b. Establishment of the Directorate of Development Planning, (from the previous Development Planning Division of DCS/Operations).
c. Designation of DCS/Photography (from the former Photographic Division of DCS/Operations).

1 July 1960	In the interest of economy and sound management, Headquarters USAF announced. in the spring of 1960, that flying activities scheduled at Orlando Air Force Base would be transferred from the Orlando Muncipal Airport to McCoy AFB, Fla., on 1 July 1960. Since operational control of the aircraft would be retained by the 1360th Air Base Squadron (1360th Air Base Group), a detachment of the 1360th Materiel Squadron was organized at McCoy, to provide maintenance support for these planes.
1 July 1960	Activation of the Base Film Library, Orlando Air Force Base, Fla.
August-November 1960	In late 1958, the requirement to establish a capability for documentation of SAC combat and combat-training activities had been assigned to APCS. This responsibility, begun on a limited scale, was eventually met by stationing photographic teams of the 1365th Photographic Squadron at certain SAC airfields, on a permanent basis. Locations selected for the purpose were Offutt AFB, Neb. (Hq SAC); March AFB, Calif. (Hq, Fifteenth AF); Westover AFB, Mass. (Hq, Eighth AF); and Barksdale AFB, La. (Hq, Second AF). Because of the impact of this action upon photographic resources within APCS, it was decided to organize these detachments over a period of months--August to November 1960--rather than to establish the four simultaneously.
September 1960	The film-depository function of the 1350th Motion Picture Squadron was designated the USAF Motion Picture Film Depository, as a named activity at Wright-Patterson AFB, Ohio, with final assignment to the 1350th MP Squadron.

1 December 1960-1 July 1961	By direction from Headquarters USAF, the Air Photographic and Charting Service, in the fall of 1960, was assigned responsibility for the procurement and/or production of training films urgently needed in the Weapon/Support Training Film Program. On 1 December, this mission was delegated to the 1365th Photographic Squadron and performed, for the next seven months, by personnel sent TDY to Wright-Patterson Air Force Base. Because of pending changes in the photographic operational requirements of APCS, this responsibility was transferred to 1350th Motion Picture Squadron at Wright-Patterson AFB, on 1 July 1961.
1 July 1961	With the transfer of MATS aircraft and supporting authorizations to McCoy Air Force Base (SAC), under the Single Manager Program, effective 1 July 1961, Detachment 1, 1360th Material Squadron, was discontinued.
August-September 1961	In directives from Headquarters MATS, APCS was informed that the complexities of military personnel accounting, administration and control, coupled with the limited number of skilled technicians and supervisors available for the accomplishment of these functions, had resulted in the decision to consolidate and mechanize this work at the operating Wing or Base level. Since the program had been established as a short-range Command project, the consolidation of records of APCS units located at Orlando AFB had been completed by 1 December 1961. In the summer of 1962, consolidation of APCS records in the Orlando CBPO was concluded by transfer of personnel files of the 1352d Photographic Group in June, and those of the following units in July--the 1350th Motion Picture Squadron; the 1356th Film Library Squadron; Detachment 3, 1365th Photographic Squadron; and Detachment 1, APCS. The 1370th Photo-Mapping Wing would, however, maintain a mechanized CPO of its own. Mechanization of both offices had been postponed by delay in obtaining necessary equipment. Delivery had recently been rescheduled for mid-November.

23 October 1961

Detachment 1, 1373d Mapping and Charting Squadron was transferred from Palm Beach AFB, Fla., to Turner AFB, Ga,. in anticipation of movement of the entire squadron into the new Geodetic Production and Analysis Center, then under construction. The departure from the Florida base was, however, hastened by transfer of the property at Palm Beach AFB from the Department of the Air Force to the Department of the Army, on 13 May 1960.

1 January 1962

Redesignation of the 1352d Photographic Squadron as Headquarters, 1352d Photographic Group, at Lookout Mountain AFS, Calif, took place. At that time its five detachments were renumbered.

On the same date, the 1369th Photographic Squadron was designated and organized at Vandenberg AFB, with assignment to the 1352d Photographic Group. (Concurrently, its antecedent, Detachment 1, 1352d Photographic Squadron, was discontinued.)

31 January 1962

Detachment 2, 1365th Photographic Squadron, was discontinued at Patrick AFB, Fla.

1 June 1962

Detachment 1, Headquarters APCS, was organized at Wright-Patterson AFB, as a result of the transfer of the commercial motion-picture procurement function from the Air Force Logistical Command to APCS (through MATS). In assuming this responsibility, APCS gained 17 civilian and two officer spaces from AFLC. (The choice of base was determined largely by the substantial amount of support that would be required for the Systems Project Office Program.

With the organization of its Detachment 1, APCS also assumed responsibility for support of the Weapon Systems Project Office (WSPO), an undertaking conducted by the 1350th MP Squadron during the previous year.

5 June 1962	Dedication of the Geodetic Production and Analysis Center of the 1370th Photo-Mapping Wing, at Turner AFB, Ga. This unique building, containing the latest photographic and geodetic equipment obtainable, housed the 1373d Mapping and Charting Squadron, as well as the Turner Air Force Base Photo Laboratory.
1 July 1962	Detachment 3-1, 1365th Photographic Squadron, was discontinued at West Ruislip RAF, England. Four of its cameramen were transferred to the Squadron's detachment at Lindsey Air Station, Germany, to augment that unit. Photographic coverage of events in the United Kingdom would, in the future, be furnished by personnel from that station.
1 July 1962	To provide photographic support to Hq, Tactical Air Command, Detachment 8, 1365th Photographic Squadron, was designated and organized at Langley AFB, Va. One officer was assigned to this unit as an APCS Liaison Officer with Headquarters TAC. Initially, photographic service was to be supplied by the 1365th on a TDY basis.
1 July 1962	To the 1350th Motion Picture Squadron were assigned two specialized in-service production programs: a. AF Systems Command Staff Film Report and the AFSC Annual Film Report. b. Photographic support to the Aeronautical Systems Division (WADD). These programs could be most advantageously conducted at Wright-Patterson AFB, since they were largely concerned with systems progress and engineering report films produced from stock footage available there.
1 October 1962	For organization and location of five additional detachments of the 1381st Geodetic Survey Squadron (Missile), [per MATS, SO G-108, 9 Aug 1962], see page 16 for details.

APCS ACCOMPLISHMENTS

In the conduct of its unique mission, the Air Photographic and Charting Service has been credited with a long list of outstanding accomplishments. A general idea of the value of the various services that this complex command performs is indicated by the following achievements:

Nuclear Tests (1951-1958; 1961-1962)

Photographic documentation of this important series -- a responsibility which the embryonic APCS inherited at the time of its establishment -- has been carried out successfully over a period of years at the Pacific Proving Grounds and Nevada Test Site by its 1352d Photographic Group (formerly Squadron).*

Photographic documentation of the Air Force Special Weapons Project also became a task assigned to APCS in the early months of its existence.

Establishment of Geodetic Ties

a. **Atlantic Missile Range Survey**

One of the initial projects undertaken by the 1370th Photo-Mapping Group (later Wing),** then stationed at Palm Beach Air Force Base, Florida, consisted in an aerial survey of the Atlantic Missile Range. Adjustment of the network, which connected previously isolated land masses, decidedly increased the over-all calibration accuracy of the range.

As an example of the geodetic errors found in the survey, the Grand Bahama Island, lying 60 miles off the Florida coast, was shown to be six miles out of position. Cuba was misplaced by a .6 mile, and other islands also were erroneously represented on charts. All geodetic positions were corrected, and tracking stations subsequently relocated to first-order accuracy.

b. **North Atlantic Tie**

In 1956, Aerial Survey Teams (AST's) of the 1370th Photo-Mapping Group succeeded in linking the North Atlantic datum system with that of Europe. This substantial achievement made possible the establishment of a true direction-and-distance relationship between points on the two continents.

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*Change of designation was made effective on 1 January 1962.

**Redesignation of the 1370th Photo-Mapping Group as a Wing took place on 1 January 1960.

c. Mid-Pacific Aerial Survey

In late 1958, the 1370th Photo-Mapping Group deployed, to the Naval Air Station on Kwajalein (in the Marshalls), an AST responsible for conduct of an aerial survey in the central Pacific. Six weeks later, the small team began operations, with four RB-50's, a C-54, and the support of a Navy LST and helicopter.

By the end of December, the required 25 lines of the Hiran net connecting Wake, Eniwetok, and the Taongi Islands had been established. In attempts to position the Hiran net in azimuth through sightings on night-flare drops, coupled with astro-gravimetric observations, the AST was assisted --both on the ground and in the air -- by personnel from the Army Map Service. Accomplishment of this phase of the mission was, however, hindered by adverse weather conditions. As a consequence, completion of the project was delayed until May of the following year.

d. Cuba-Central America Tie

This Caribbean net, also known as the Yucatan Tie, was accomplished by an AST of the same organization, employing two RB-50's. Beginning operations on 1 September 1959 and using the Naval Air Station at Key West, Florida, as a staging area, the aircraft flew a total of 59 missions. With computations to be made at its home station -- then Turner Air Force Base, Georgia* -- the AST had concluded its work by the close of that year. In the course of this project, one of the flight crews brought back the longest Hiran measurement made up to that time -- a distance of more than 560 statute miles.

e. Japan-Taiwan (Formosa) Tie

In October 1959, a small detachment from the 1370th Photo-Mapping Wing (then Group)** resumed work on a Hiran survey stretching from Japan southward through the Ryukyus to Okinawa, and then westward to Taiwan. Flying RB-50 aircraft based at Clark Air Base in the Philippines and using Kadena Air Base, Okinawa, as a staging area, the crews developed a 37-line network involving twelve ground stations. Through strenuous effort, the team completed its assignment by the end of February 1960, thus establishing a geodetic tie between the Tokyo and Koshizan datums.

f. Brazil-Venezuela Tie

The task of accomplishing a precise geodetic tie across a large gap in the existing ground triangulation of northeastern South America was undertaken by an AST of the 1370th Photo-Mapping Wing in April 1960. Included in the area to be surveyed -- a strip 1,700 miles long and 500 miles wide -- were the mouths of the Amazon and Orinoco Rivers, the rainforest belt, and selected jungle, savannah, and mountain regions of Venezuela, British Guiana, Surinam, French Guiana and Brazil. Using Atkinson Field, British Guiana, as an operational base and Belem, Brazil, as a staging area and supply point for ground stations, this AST, by 30 June 1962, had completed 73 percent of the 194 Hiran measurements required. This electronic-survey project represented the longest

*1370th Photo-Mapping Group was transferred from Palm Beach AFB, Fla., to Turner AFB, Ga., in February 1959.

**For change of designation, see page 10.

overland tie ever attempted by such a method.

In connection with the trilateration net, gravity-reference studies and astronomic positioning in azimuth have been conducted by attached personnel from the Inter-American Geodetic Survey and the 1381st Geodetic Survey Squadron (Missile). Also an integral part of the project has been the precise, visual photographic mapping of large areas, tied to the Hiran net by means of aerial electronic-controlled photographic crossflights. A total of 19,881 linear miles of photography has been assigned.

g. Eastern Pacific Tie

Equipped with three RB-50's and one C-54, a 138-man team from the 1370th Photo-Mapping Wing was deployed to Hickam Air Force Base, Hawaii, in July 1961, to conduct an aerial survey designed to establish a common datum for islands of the Hawaiian Archipelago. In addition, Midway and Johnston Islands were to be geodetically positioned in relation to this chain.

The project consisted of 56 Hiran measurements. Since the long, narrow network had no connection with any existing datum, it was necessary to ascertain the astronomic azimuth of 16 of its lines. Determination of 11 of these was accomplished by the AST -- with the assistance of Army Map Service personnel --through use of Sodano light-crossing technique. This method, relatively recently employed by the 1370th, is dependent upon the simultaneous sighting of a bright light, mounted under the fuselage of an aircraft flown midway between two ground stations, which are equipped with azimuth measuring instruments. The five remaining azimuth determinations were accomplished by personnel from the U.S. Coast and Geodetic Survey. By 30 June 1962, the field phase of the project had virtually been concluded.

h. Southwest Pacific Aerial Survey

In late March 1962, an AST, with three RB-50's and a complement of 140 men, was deployed by the 1370th Photo-Mapping Wing to Andersen Air Force Base, Guam. Beginning operations at the end of that month, the team has, as its objective, the exact positioning of each of the principal groups of the U.S. Trust Islands within a common datum.

Personnel of the Air Weather Service are assisting the AST in collecting necessary meteorological information in the mission area. Members of the Army Map Service also are working closely with the team in measuring the Sodano azimuth between selected ground stations.

This project represents one phase of a larger cartographic operation that is to be carried out in the Southwest Pacific.

Aerial Photographic Mapping

In the course of years, teams from the 1370th Photo-Mapping Wing have completed the aerial photo-mapping of large land areas, including airfields, cities, harbors and designated sites in the Zone of the Interior and US oversea possessions. Under terms of special agreement, similar missions have been carried out in foreign countries around the globe. Presently, for example, an AST operating from Bogotá, Colombia, and another using Lima, Peru as a base, are engaged in missions of this type. The resulting data will be used in the revision of existing maps, and in the compilation of charts for regions within the two countries not previously covered cartographically.

That the amount of photographic mapping accomplished annually by the Wing represents a global effort of sizeable proportions is shown by the figures for the fiscal year 1962 -- a total of approximately 278,000 square miles covered during that period.

Special Missions

In the course of years, members of the 1370th Photo-Mapping Wing have flown a number of special missions of a humanitarian character. The following four, carried out in 1961, will serve as illustrations:

Rescue of Shipwrecked Seamen

On 14 January 1961, an RB-50 crew, from the Wing's Aerial Survey Team based in the Canal Zone, engaged in a 9½-hour search for survivors of two shipwrecks that had occurred in the Caribbean Sea on the first and sixth of that month. Flying at low altitude, crew members eventually caught sight of two men and a half-sunken schooner on a barren reef 245 miles northwest of Panama. A raft and survival kits were dropped, and messages were sent to two ships in the vicinity. While the nearer vessel approached the island and rescued the seamen, the aircraft circled overhead and transmitted reports to the Panama radio station. On the homeward flight, a life raft, with several persons waving frantically, was sighted. The aircraft commander immediately alerted ships in the area. One of these promptly altered its course to rescue three mariners, who had been adrift for more than eight days. The success of the AST members in locating the two groups of survivors was considered especially noteworthy, inasmuch as the failure of previous wide-spread USAF and Naval searches had led to the belief that all persons aboard the sunken vessels had perished.

Airlift of Injured Scientists

At the request of the United States consul in Belem, Brazil, the 1370th's AST stationed at Atkinson Field, British Guiana, undertook the rescue of two Brazilian scientists, who had been severely injured when their canoe was swept over a waterfall on the Jari River, a large tributary of the Amazon. The actual mission -- which involved the airlifting of the two men from the village of Santo Antonio, the scene of the accident, to Porto de Moz, a 100 miles away -- was carried out in early September 1961, by a crew of the AST's H-21 helicopter operating from Santarem, Brazil, on the Amazon River.

"Food for Peace" Flights

Two special missions were flown on 9 and 12 October 1961 by personnel from the 1370th's Bogotá-based AST, in RC-130 type of aircraft. These flights, from Lima to Juliaca, Peru, were the first made in connection with the State Department's "Food for Peace" program -- a project designed to provide meals for school children. On both days, the planes transported food and officials of Peru and the United States.

Disaster-Support Flights

On 1 November of that year, an RC-130 of the same AST engaged in initial disaster-support flights made between Albrook AFB in the Canal Zone and Belize, British Honduras. These operations, directed by the Commander-in-Chief, Caribbean Air Command, provided relief for areas suffering from the destruction caused by "Hurricane Hattie".

Missile Launch-Site Surveys

Beginning operations in 1958,* under the tutelage of experienced teams from the U.S. Coast and Geodetic Survey, the 1381st Geodetic Survey Squadron (Missile) -- orginally an operating location -- soon acquired skill, gained strength, and developed a training program well suited to its needs. Many of its activities -- by their very nature -- bear classification. However, a few unclassified examples will illustrate the scope of the unit's accomplishments and indicate the types of operations in which it is presently engaged.

Early Operations

Initially, the organization was made responsible for geodetic surveys in support of the THOR program in the United Kingdom and the location of launch sites for ATLAS missiles in California. As a larger number of trained personnel became available, it was possible for the unit to meet operational commitments brought on by the JUPITER project in southern Europe, the need for locating WS-117-L Data Acquisition and Tracking Units in the Pacific, and the establishment of launch sites for the MACE in western Europe and on islands of the Pacific.**

Later Assignments

Not all projects subsequently assigned to the Squadron took its teams so far afield. Support given to the HOUND DOG program, for example, consisted in surveying sites for service shops and training facilities to be used in connection with GAM-77 missiles. The required information pertained primarily to the determination of azimuths and the positioning of stations -- all of them spread across the United States, with the exception of one in Puerto Rico. Effort expended in furtherance of the SNARK program also was related to the selection of locations for assembly and checkout buildings in the United States. These projects, like all others undertaken

*See p.2 of this summary.

**In some areas, the MACE replaced the MATADOR.

by the Squadron, were accomplished in three stages -- reconnaissance of the designated areas, deployment of survey teams, and the preparation and distribution of data sheets.

With the rapid expansion of missile-testing operations at Vandenberg Air Force Base, the demand for missile surveys there and at other west-coast locations added substantially to the workload of the unit. A continuing need for this type of service was met by organization of the Squadron's Detachment 1 at VAFB in April 1960.* Since that time, the mission of this unit was enlarged by the assignment of two similar requirements -- the providing of surveys for TITAN and MINUTEMAN locations, and the positioning of radar sites and BOMARC and NIKE emplacements pertaining to the SAGE Project.**

Some tasks assigned to the Squadron have been carried out in conjunction with the work of aerial survey teams from the 1370th Photo-Mapping Wing. In establishment of the Cuba-Central America Tie, for example, personnel from the 1381st Squadron supplied astronomic surveys for the ten Hiran ground stations in the trilateration pattern. An associated undertaking consisted in the determination of a gravity-reference net extending through Central America, across the northern countries of South America, and into Brazil. This endeavor necessitated the establishment of 91 gravity stations -- a substantial contribution to the World-Wide Gravity Project sponsored by the U.S. Air Force.

Within the past year, the number of projects in which stellar cameras could be employed to advantage has increased decidedly -- a trend noted within the unit by the formation of its Stellar Camera Division, in the fall of 1961. One of the principal undertakings in which these small groups are playing an important part is Project ANNA, a joint service program designed, in cooperation with the National Aeronautics and Space Administration, to maintain in orbit a satellite from which both geodetic and geophysical data can be obtained. Participation by APCS -- one of the three prime Air Force agencies*** responsible for conduct of this experiment -- consists largely of stellar-camera operations conducted by these teams at selected tracking stations around the world.

For some time, missile-site survey operations in the north-central and western United States, along with periodic checks required to insure the continued accuracy of previously established positions, have necessitated the maintenance of a large number of 1381st personnel in those areas. Since the cost of carrying so many members of the unit on TDY status represented a substantial sum, it was decided, on the basis of both efficiency and economy,

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*See p.5 above.

**Abbreviation for Semi-Automatic Ground Environment.

***Other agencies are the Aeronautical Chart and Information Center and the Air Force Cambridge Research Laboratories.

to organize the following detachments of the Squadron on 1 October 1962, at the installations indicated:*

Detachment 2	Malmstrom AFB, Montana
Detachment 3	Minot AFB, North Dakota
Detachment 4	Ellsworth AFB, South Dakota
Detachment 5	Whiteman AFB, Missouri
Detachment 6	Francis E. Warren AFB, Wyoming

Photographic Projects and Programs

The multiple photographic services which APCS provides for the Air Force and allied agencies are too numerous to be mentioned in detail. A few examples of outstanding accomplishments in various fields of photographic endeavor will, however, indicate the capabilities of the Command's far-flung units and the success with which their efforts are attended. This phase of the APCS mission is carried out by two large components -- the 1365th Photographic Squadron and its seven detachments, which furnish coverage for the eastern United States and Europe; and the 1352d Photographic Group, composed of the 1369th Photographic Squadron, three detachments, and several minor dependencies, which meet the needs of the western half of the United States and Pacific areas.

Continuing Programs

Maintained on a continuing basis is The Air Force Story, (SFP 263) a motion-picture program with a designation that is self-explanatory. At the close of 1958, Volume I -- a sequence of 26 films, carrying the narrative to June 1950 -- had been completed. Since then, the early chapters of Volume II have appeared -- the initial one entitled "The Air Force and the Atom Bomb", and the next three dealing with different phases of the Korean Conflict. Recently released were three additions to the postwar series: "Our World-Wide Air Force" (Chap V); "Entering the Era of Missiles" (Chap VI); and "The Air Force Academy" (Chap VII). In progress is "Aerospace Medicine" (Chap VIII). Supplementary aspects of the narrative will be added as need arises.

Most widely known of the regularly scheduled projects is the Air Force News Review, compiled from documentary footage made by APCS in-service photo units, and distributed throughout the Air Force for screening at monthly Commander's Call assemblies. Of these productions, AFNR 49 (December 1959) attracted special attention, not only on account of the excellence of the film, but because it was the first of the series to be produced in color. Thereafter, issuance of the December report in color was established as an annual feature of the program. Since these films are limited to 14½ minutes and are both informative and entertaining, AFNR's released for public viewing are often included in the schedules of television stations.

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*MATS, SO G-108, 9 Aug 1962.

Another monthly project is the AFSC Staff Film Report, prepared from clips selected by the Air Force Systems Command from two main sources -- photographic material furnished by AFSC contractors and centers, and that produced by APCS units. By the end of September 1962, Report No. 100 in this category had been completed. Also provided for the same agency is the AFSC Annual Activities Report, a yearly summary of its varied research and development programs.

Two film reports are furnished periodically to the Deputy Commander for Aerospace Systems (DCAS) -- an annual compilation showing various phases of the ballistic missile and space systems; and a semiannual review of the space-systems program. (Both films were formerly produced on a quarterly basis.)

The USAF Missile and Space Film Report, prepared quarterly for Headquarters USAF, is a responsibility assumed by APCS in mid-July 1961. (Realization that this production reached approximately the same audiences as the BSD and SSD* films was a determining factor in discontinuance of the DCAS requirement for quarterly reports.)

To be produced at five-week intervals is the "Fact Finder" series -- a continuing film report of USAF operations in Southeast Asia. This responsibility, assigned to APCS by Headquarters USAF in mid-June 1962, was met by dispatching to the area a photographic team to procure combat documentary footage on which these films would be based. Since PACAF is the agency most interested in these productions, the photographic task force is presently composed of members from Detachment 3, 1352d Photo Group, augmented by personnel and equipment from the Continental United States. The reports themselves will assist in the establishment and evaluation of training, equipment, and weapons requirements in USAF activities in that part of the world.

Often other types of long-range assignments assume the characteristics of continuing projects. A case in point is the series of some sixty Film Training Aids requested by the Director of Flight Safety Research (DIG), Headquarters USAF, in October 1958. Since coverage of the FTA's included preflight and postflight inspections, pilot emergency procedures, and in-flight refueling techniques, involving 16 types of operational aircraft (fighters, bombers, cargo planes and helicopters), it was several years before the project could be completed. Current examples are to be found in the "Airman's World," a series of 26 TV programs provided by APCS for SAFOI;** the "Dynamics of Moral Leadership," consisting of films to be produced for the Chief of Air Force Chaplains, over a period of three years;*** and the numerous motion pictures prepared at the request of the Deputy Inspector General for Safety.**** Since these films are issued under individual titles, their names usually indicate the directorates of DIG/S -- Ground, Flight, Missile, Nuclear, etc. -- most interested in their production.

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*I.e., Ballistic Systems Division and Space Systems Division.

**By 30 June, the 26 programs had been released.

***Four films in this series had been completed by the end of June 1962.

****Since all requests for safety films now come to APCS from DIG/S, the Flying Safety Film Report, produced for several years on a quarterly basis for the Directorate of Flying Safety Research, is now represented in the extensive Safety Program by occasional general summaries.

Missile and Space Projects

At Cape Canaveral, Florida (Missile Activities)

Photographic support for the color documentation of missile activities at the Air Force Missile Test Center was initially provided by cameramen on TDY from the 1352d Motion Picture Squadron. With the establishment of the unit's operating location at Vandenberg Air Force Base, California, this responsibility was gradually transferred to the 1365th Photographic Squadron (then Group). For the next three years (January 1959-January 1962), a detachment of the 1365th, located at Patrick Air Force Base, Florida, made still and film recordings of the progress of Air Force ballistic missile and satellite programs by documenting the tests and launchings of the THOR, ATLAS, TITAN, MIDAS, ECHO, TIROS and TRANSIT, for example. Through employment of the M-45 tracking mount, high-speed cameras and various lenses having focal lengths up to 180 inches, its cameramen developed an advanced technique that established a new standard for this type of photographic documentation. Black-and-white and color coverage obtained through tracking with a lens of such size and sensitive depth of field proved to be most advantageous, when the first MINUTEMAN was launched on 1 February 1961. A print of the footage made at that time was received with entnusiasm by the Air Force Ballistic Missile Division, which indicated that the operational data contained in the film would advance the MINUTEMAN program.

In January 1962, operational activities of this detachment of the 1365th Photographic Squadron were discontinued at the Air Force Missile Test Center. However, the organization proper, from its home station at Orlando AFB, continues to supply photographic services there upon request.

At Vandenberg Air Force Base, California (Missile Activities)

When the construction of missile pads at Vandenberg AFB was undertaken, many agencies assumed that provision for photographic services there would be patterned after the plan in use at the Cape Canaveral launch site.* However, for reasons of economy, security and freedom from threat of strike by civilian contractors, it was decided that, at the new missile center, these needs would be met from in-service sources. Consequently, in July 1958, the 1352d Motion Picture (later Photographic) Squadron** was given this responsibility -- an assignment carried out by a dependency, initially under operational control of the parent organization. With limited personnel and basic equipment provided by the Lookout Mountain Air Force Station, the unit assumed its duties at VAFB on 2 September 1958.

The mission of the embryonic Detachment 1 (an operating location for the first six months) consisted in furnishing motion picture, still and documentary photography to the 1st Missile Division (SAC) and the Air Force Ballistic Missile Division (ARDC). This support comprised, on an unprecedented scale, coverage of

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*Since the Atlantic Missile Range is serviced by Pan American World Airways, much of the photographic work there has been done by a civilian contractor.

**For redesignation, see page 5.

test firings and launches; production of operational, training and safety film reports; and the supplying of engineering-sequential photography, which proved to be exceeding useful to both Divisions and their contractors in evaluating successful operations and detecting malfunctions accountable for failures. Added, in the spring of 1959, was a requirement for technical-manual photography of superior quality -- an assignment that demonstrated the ingenuity of the cameramen in overcoming such handicaps as inadequate interior lighting, the prevalence of dust, and the necessity of working in confined spaces, where the placement of cameras was difficult.

Photographing of the first THOR launch took place on 16 December 1958, when highly satisfactory results were achieved.* With expansion of the missile program, demands for photographic services at VAFB steadily increased. Despite the many problems with which the Detachment 1 was confronted, the unit was able to cope with most situations through assignment of additional personnel and support provided by the parent organization. By 1 July 1959, when temporary camera control and timing circuits had been installed at seven emplacements in the THOR complex and at one facility in the ATLAS area, full responsibility for this phase of the 1352d's mission was transferred to the Detachment.

Thereafter, the unit successfully carried out most assignments through reliance on its own resources. For the remainder of 1959, the major still and documentary coverage consisted in photographing projects under construction. During the same period, optical-instrumentation requirements were fully met on operations that included an ATLAS firing and six daylight and two night, SAC-controlled, Royal Air Force THOR training launches.** Especially noteworthy was the ATLAS event of 9 September, since it was the first ICBM to be launched by an operational crew composed entirely of Air Force personnel; and, for the Detachment, it represented initial accomplishment of this type of photography in a weapon system than new at Vandenberg Air Force Base.

In the course of the next two years (January 1960 - December 1961), Detachment 1, 1352d Photographic Squadron, furnished coverage for many single and double propellant loading exercises,*** flight-readiness firings, missile launches, and various special -- but related -- projects. One of the assignments in the last category concerned Operation BIG SMOKE -- an effort on the part of the 1st Missile Division to determine wind-flow patterns at VAFB and neighboring areas, through use of smoke generators. In support of this study, made necessary by the toxic character of liquids utilized in missile activities, two still photographers from the Detachment were provided daily for a thirty-day period (11 July-10 August 1960). One of these men was stationed on the ground to record observations; the other photographed smoke-colored wind patterns from a helicopter flown during the tests.

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*The documentary film resulting from this effort received nation-wide distribution. For technical photography, including engineering sequential in both motion-picture and still forms, 30 cameras were used.

**The first night launch took place on 1 December 1959.

***Prior to 22 March 1960, the 1st Missile Division had not required photographic coverage for this type of operation.

With the completion of additional missile complexes, the capabilities of the Detachment were often heavily taxed in providing documentation and optical instrumentation photography at any time of day or night, and in all types of weather.* On 3 May 1961, the first successful launch of a TITAN missile from Vandenberg AFB took place -- a most gratifying milestone in aerospace development, since it was also the first successful TITAN silo-launch. From the favorable comment which the documentary and optical-instrumentation footage received upon release, it was obvious that the photographic recording of the event was regarded as an achievement. Three weeks later (24 May) when an ATLAS launch was made from Vandenberg AFB, cameramen from Detachment 1 not only covered pre-launch activities and lift-off, but also succeeded in capturing return of the reentry vehicle to a predetermined area.

Since the training of crews for all ICBM bases was being conducted at Vandenberg Air Force Base, preparation for introduction of the MINUTEMAN there was begun soon after the initial launch of this missile at Cape Canaveral on 1 February 1961. Construction of a suitable launching complex was soon undertaken; and, by January 1962, requirements for a MINUTEMAN camera console system had been completed. For purposes of study in connection with the MINUTEMAN program, photographic data regarding cloud and fog cover was obtained by the Detachment, through nightly time-exposures made with a K-17 camera, over a twelve-month period. Before the close of FY 1962, sufficient progress had been made for the unit to photograph satisfactorily the lowering and removal of a MINUTEMAN missile from its underground silo -- a photographic effort that was regarded as something of a feat.

For the Detachment, the past twelve months had constituted a period of considerable importance. During that time, the unit had increased in numerical strength, assumed additional duties,** and had been assigned a larger supporting role in the missile program. In the course of the year, its designation had been changed to 1369th Photographic Squadron (1352d Photographic Group);*** and the principal units to which it furnished services were now the 6595th Aerospace Test Wing (AFSC) and the 1st Strategic Aerospace Division (SAC).

Missile Projects in Other Areas

In 1958, APCS was given responsibility for photographic coverage of the THOR missile program in the United Kingdom -- a mission delegated, in July of that year, to the 1363d Photographic Flight, a component located at Lindsey Air Station (Wiesbaden), Germany.**** Since special emphasis had been placed

*Since operational missiles are to function in all kinds of weather, no SAC launch was postponed because of rain squalls, high winds, etc.

**Photographic responsibilities regarding missile projects in other areas are discussed in the following section.

***See entry under 1 January 1962, page 8.

****In the reorganization of APCS photographic units in July 1960, the 1363d Photographic Flight was replaced by Detachment 3, 1365th Photographic Squadron. (See page 5.)

on obtaining detailed documentation of construction at the Feltwell (England) site, the earliest of these installations, and the ceremonies marking the official transfer of the first THOR missile to the Royal Air Force (19 September), initial photography was accomplished by a team then on TDY from the 1365th Photographic Group. This contingent was, however, soon replaced by cameramen from the 1363d Photo Flight transferred to the unit's recently established operating location at the RAF station at West Ruislip, England.

For the next eighteen months, this detachment continued to document, at short intervals, the development of the THOR program.* Because aerial photography proved to be the most satisfactory means of recording surface construction, much of the filming was done from a helicopter, with the four points of the compass used as reference for orientation. Although construction at the various missile sites sometimes progressed rather slowly, the photography required of the detachment was completed in May 1960.

In the second half of 1959, the 1363d Photographic Flight undertook a comparable assignment in Italy -- the furnishing of still and motion-picture coverage of the JUPITER program. This responsibility, carried out on a TDY basis, entailed documentation of the project from its beginning. Initial activity therefore consisted in photographing virgin terrain and abandoned buildings that were to be rehabilitated prior to the commencement of construction connected with missile deployment proper. A summary of activities was presented in two film reports completed by the end of June 1960. In addition, still coverage of the program was supplied to the Historical Division of USAFE, the Italian Air Force, and the Military Advisory Assistance Group in Rome. From this last organization, the Detachment received notification that the photographs had been invaluable in keeping its personnel informed of the current status of the project.

Maintained on a continuing basis is film documentation of the MACE program in West Germany.**

In 1959, when the first ICBM's were being phased into the SAC weapons inventory, APCS was given responsibility for photographic documentation of the progress in construction of Atlas and Titan bases in the western half of the United States. Conduct of this mission was reassigned to Detachment 2, 1352d Photographic Group (then Squadron), activated on 1 April of that year, at Ent Air Force Base, Colorado. For the remainder of 1959, the primary effort of the unit was directed toward coverage of missile sites located in five states. During the next six months, photography was carried out in ten states, with more than three times as many missile sites covered -- a task that required approximately 15,000 miles of highway driving per month for its accomplishment.

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*Meanwhile, the team was also able to film, at AF bases in the United Kingdom, events suitable for inclusion in the Air Force News Review.

**The MACE, a missile of newer design, gradually replaced the MATADOR, which was in use originally.

By the second half of 1960, the workload of the Detachment had been substantially increased by construction of a large number of MINUTEMAN sites in Rocky Mountain and Central United States areas and the addition of TITAN complexes in the Southwest. In early 1961, documentation of other TITAN emplacements in the region west of the Mississippi also was undertaken. By that time, marked advance -- and certain similarities -- in the construction program made possible reduction in the number of installations previously visited on a monthly basis. The photographing of only representative complexes and segments of sites within the Detachment's area of responsibility further eliminated duplication of effort. However, the hours spent in support of the program remained virtually unchanged, due to the assignment of new sites and the multiplication of technical difficulties inherent in meeting motion-picture requirements in the in the more advanced weapon systems.

In recent months, the Detachment also provided photographic optical instrumention in various launch areas in which power cables, camera positions, and permanent mounting pads for camera stands were required. The furnishing of such service was, however, largely dependent upon the availability of personnel and equipment.

As missile sites are constructed in the eastern United States, much responsibility for photographic coverage is being assumed by the 1365th Photographic Squadron.

Another recent APCS project, assigned in the spring of 1962 to the 1352d Photographic Group, consisted in documentation of a team from the Command's 1381st Geodetic Survey Squadron (Missile), on TDY in Okinawa. Motion-picture and still photography, accomplished by the 1352d's detachment stationed at Yamato Air Base, Japan, included various aspects of the tactical-missile hardsites approaching completion and the operational readiness of the unit. Also shown were the equipment used by the surveyors and the type of activity in which they were engaged.

Space Exploration Projects

Satellite Programs

Since early 1958, when the Advanced Research Projects Agency (ARPA) was established within the Department of Defense to control the military applications of astronautics, components of the Air Photographic and Charting Service have participated in various space programs. The initial enterprise in this field (Project PIONEER), undertaken as a joint-service effort, consisted in launching, from Cape Canaveral, a succession of small space vehicles to explore the area in the vicinity of the moon and relay back useful data. In preparation for the three "lunar probes" allotted to the Air Force, elements of APCS photographed satellite tracking stations in Hawaii, Singapore, and Manchester (England). Of the first PIONEER event, which took place on 17 August 1958, the 1365th Photographic Group (later Squadron) obtained complete motion-picture and still documentation.* The other two USAF launches, made in October and November of that year,

*To APCS, its part in this program was known as Operation MONA.

were covered with equal success.*

When, in late 1958, the Air Force was preparing to engage in a series of experiments concerned with recovery of space vehicles, the Air Photographic and Charting Service was assigned responsibility for photographic services connected with this continuing program. Since, under Project DISCOVERER, the satellites were to be launched from Vandenberg Air Force Base, documentation of this phase of the program was delegated to the 1352d's detachment (later 1369th Photo Squadron) located there. Consequently, complete photographic coverage of the successful launch of DISCOVERER I on 28 February 1959 was obtained through the skill of that unit.

According to plan, an orbiting satellite of this type, after following a polar path for a short period at relatively low altitude, would release its reentry capsule in the vicinity of the Hawaiian Islands--an area that, in time, came to be known as the Pacific Ocean "ball park". In support of this portion of the program, a nine-man photographic crew from Orlando Air Force Base was dispatched, in April 1959, to Hickam AFB, Hawaii. Using that installation as a base, this team -- and its replacements, in turn** worked in close cooperation with scientific, technical and flying units concerned with recovery of space vehicles. It therefore was not surprising that a 1365th cameraman was among those decorated for the first "aerial snatch" of a DISCOVERER capsule -- on the basis of the documentary footage that he obtained at that time (19 August 1960).*** Before the close of 1960, the 1365th Photographic Squadron was relieved of this duty, which was then transferred to Detachment 3, 1352d Photographic Squadron, stationed in Hawaii. By mid-October 1961, cameramen of that unit had photographed, in the long DISCOVERER series, the plucking of the sixth capsule from the sky (DISCOVERER XXXII) and the recovery of the third (DISCOVERER XXIX) from the sea by USAF SCUBA divers.**** In the remaining

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*Although none of these three satellites was placed in orbit, the PIONEER launched on 11 October 1958, traveled about 79,000 miles -- more than one-third of the distance to the moon. Since instruments within the satellite radioed back data on the earth's magnetic field, micrometeorites and radiation intensities, the flight was regarded as a notable scientific achievement.

**Since each team spent 179 days in the area, several were stationed there in the course of this assignment.

***Most motion-picture and still photography was accomplished from the C-119, from which the "catch" was made. Perched on the open tail of the aircraft, high above the Pacific, the cameraman (SSgt Wendell King) was tied to the plane by a single strap attached to his parachute harness.

****SCUBA - An abbreviation for Self-Contained Underwater Breathing Apparatus.

months of that year, coverage of the capture of three others was obtained.* This program, which has been highly successful in testing space equipment, procedures and techniques, is still in progress -- with APCS units supplying photographic services.

Experimental Manned Space - Vehicles

In the last six or seven years, APCS photographic units have provided still and motion-picture documentation of the many experiments conducted by the Air Force in continuation of its historic efforts to reach higher altitudes, increase the speeds of aircraft, and lengthen the duration of flights -- projects that have contributed substantially to the advancement of various phases of the manned spacecraft program. In October 1958, for example, cameramen of the 1352d furnished film coverage for Project MANHIGH III, a research program designed to study environmental factors under space equivalent conditions during a high-altitude manned balloon flight.** Recording of the initial features of the experiment -- the outfitting of the pilot, Lieutenant McClure, for the flight; the readying of the capsule; and the sealing of the officer within -- was accomplished at the contractor's plant in Minneapolis, Minnesota. When high winds and heavy rain repeatedly delayed the launching of the balloon from an open-pit, iron-ore mine at Crosby, Minnesota, the project was transferred to Holloman AFB, New Mexico. Upon arrival there on 7 October, the cameramen found that gusty winds again caused postponement of the ascent. However, on the following morning, when a successful launching was accomplished, both motion-picture and still coverage of the event was obtained.

In the following year, when Captain Joseph W. Kittinger, Jr., of the Air Force, on 11 December 1959, accomplished a freefall of 74,700 feet from the gondola of the balloon "Excelsior," a cameraman from the 1352d recorded the incident at the White Sands Range, Holloman AFB, New Mexico. This parachute jump and previous ones made by Captain Kittinger*** were part of an ARDC high-altitude survival project.

Toward the end of April 1959, additional responsibilities of a continuing nature were delegated to the 1352d -- the furnishing of motion-picture and still-photo documentation of the X-15 flights, designed to further research in aerodynamic heating, stability and control; and providing of film depository

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*The last of these was the capsule from DISCOVERER XXXVI, which was recovered from the sea by Air Force frogmen on 16 December 1961. By that time, the C-130 was being employed for aerial snatches, and a more elaborate, remote camera system was used for photographing in-flight sequences and recovery activities.

**MANHIGH III was similar to the two previous balloon ascents in the series, recorded by the 1352d in June and August 1957, when altitudes of 96,000 and 101,000 feet were reached. In this instance, however, more instrumentation was used and a loftier penetration was attempted. (Actually, an altitude of 101,000 feet was again attained.)

***About a month earlier (16 November 1959), Captain Kittinger had made a record parachute leap of 76,400 feet.

services for all X-15 footage. Also assembled, by request, was a 35mm color film, giving the complete history of this pioneering manned space-vehicle, from the drawing-board stage through its first full-powered flight.

In subsequent years, the unit's cameramen filmed the succession of spacecraft that replaced the orginal X-15. At Edwards AFB, California, they photographed preparations for departure of the X-15 borne by its mother plane; and later, from the B-52, they recorded, at the moment of launch, the drop-off and breakaway of the glider. From chase aircraft, they took aerial photographs of various features of its flight and documented its behavior during all phases of its return to earth. They also supplied generous coverage of the activities of the individual X-15 pilots, who had established high-altitude records and developed techniques that greatly assisted in formulation of the newer X-20 (Dyna-Soar) program.

However, on 18 July 1962, when President Kennedy presented the Collier Trophy for 1961 to Major Robert White and his three colleagues,* it was cameramen from Detachment 1, 1365th Photographic Squadron, at Andrews AFB, that recorded the event. On the following day, members of the same unit documented the awarding of Astronaut wings to Major White for his ten-minute flight in an X-15 to a height of 314,750 (59.6 miles) on 17 July 1962.**

Project MERCURY

During the fifteen months preceding the launching of an astronaut into orbital flight, APCS photographic units participated in other programs related to Project MERCURY. At the Aeromedical Field Laboratory,*** Holloman AFB, New Mexico, cameramen from the 1352d Squadron recorded the training of chimpanzees for space travel and, in a series of short sequences, showed the psychological preparation of the animals for such operations. When, in the testing of a Mercury capsule, the first of these chimpanzees - Ham - was rocketed into space from Cape Canaveral on 31 January 1961, members of the 1365th Squadron, located at Patrick Air Force Base, documented the firing of the launching vehicle and tracked it downrange toward Bermuda, where the capsule was plucked from the Atlantic.****

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*The other X-15 pilots were Comdr. Forrest Petersen (USN); Joseph Walker (NASA), and Scott Crossfield (North American Aviation). Three of these pilots -- White, Walker, and Crossfield -- had jointly won the Harmon Trophy for 1960, in recognition of their outstanding achievements in establishing, in the X-15, speed and altitude records in the course of that year.

**At the Air Force Association's national convention, held at Las Vegas, Nevada, in September 1962, Major White -- as X-15 pilot and the first winged astronaut -- received the David C. Schilling Trophy, an AFA award.

***Established in 1952, with a Space Biology Branch.

See next page for **** footnote.

In support of Project-Mercury activities which NASA was conducting at its rocket station on Wallops Island, Virginia, the agency, in October 1960, requested APCS to provide motion-picture coverage of various important space-vehicle launches from that installation. This responsibility was jointly assumed by the 1352d and 1365th within a short time -- and, in the case of the second unit, documentation was supplied on a continuing basis throughout the following year.*

In February 1961, photographers and sound technicians of the 1365th participated in documenting an interview of the astronauts by representatives of national news media. Three months later (5 May 1961), when Comdr. Alan B. Shepard, Jr. (USN) crossed the frontier into space in the course of his 302-mile flight down the Atlantic Range, the 1365th's detachment at Patrick AFB furnished tracking mounts and cameramen to the TV pool that provided nation-wide coverage of the event. Similar photographic service was provided for the flight of Capt. Virgil J. Grissom (USAF), who, in his Liberty-Bell 7 capsule, was boosted to an altitude of 118 miles, attained a speed of 5310 mph in the course of his flight, and was parachuted to a safe landing some 300 miles downrange, on 21 July 1961.**

To insure documentation of the orbital flights of Lt. Col. John H. Glenn, Jr. (USMC) and Comdr. Malcolm Scott Carpenter (USN) on 20 February and 24 May 1962 respectively, cameramen from various APCS photographic units were flown to Project-Mercury sites around the globe. Included in the list were stations along the Atlantic Range; in Hawaii; at Salisbury, Rhodesia; Nairobi, Kenya; Kano, Nigeria; and Benguerir, Morocco. If, for any reason, these astronauts had been forced to abort, documentation of their reentry would have been possible. On 3 October 1962, when, at the end of six orbital flights, Comdr. Walter M. Shirra, Jr. (USN), in his Sigma 7 capsule, was parachuted into the Pacific near Midway Island, his landing and transfer to the carrier U.S.S. Kearsage were recorded by APCS cameramen.***

****(From p.25) The return of Ham to the Holloman labbratory was recorded by LMAFS photographers. Afterward one of the group -- SSgt Kenneth A. Smith -- submitted, as his contribution to the APCS monthly photographic contest, an amusing photograph of Ham looking, from his training couch, at the picture of himself displayed on the cover of LIFE for 20 February 1961. This entry was later selected as the blabk-and-white winner in the APCS photo-of-the-year contest for 1961.

*The service rendered by the 1365th was performed by the Squadron's detachment at Patrick AFB.

**A year later (19 June 1962), Capt. Grissom was awarded the first General Thomas D. White USAF Space Trophy for his outstanding contribution to the Nation's progress in aerospace during 1961. Presentation of the trophy by Mr. Eugene M. Zuckert, Secretary of the Air Force, was photographed in Washington by a cameraman from the 1365th's Detachment 1.

***In this instance, steps were again taken to provide for documentation of the astronaut's landing and rescue from the sea, in case the operation had not progressed according to plan.

Joint-Service Operations

In recent years, APCS units have furnished photographic support for numerous special programs carried out by major commands. Many of these assignments were connected with massive joint-service exercises. For example, BIG SLAM/PUERTO PINE (FR 127),* a combined Air Force-Army operation of March 1960, in which MATS airlifted approximately 21,000 troops and 22 million pounds of equipment from various ZI bases to Puerto Rico,** was thoroughly documented by 1352d and 1365th cameramen and photographers. Material furnished included approach-slide kits for five of the primary insular airfields to be used, coverage of the entire operation, and short stories filmed for newsreel and TV release.

In June 1960, motion-picture and still photography was accomplished for MOBILE YOKE (SFP 1052),*** a goodwill training exercise in which a TAC Composite Air Strike Force was deployed to Southeast Asia. Coverage included preliminary and deployment phases of the program at George AFB, California, staging through airfields in Hawaii and the Philippines, arrival at Bangkok, Thailand, and operations of the Strike Force in that area.

In February - March 1961, documentation was furnished by the 1352d's cameramen for Exercise LONG PASS (FR 168),**** a combined Army-Air Force logistic maneuver to test contingency plans regarding strategic deployment of troops over long ocean hauls. Involved in the operation was the movement of 120 aircraft from ten USAF bases to Clark Air Base, in the Philippines.

During the remainder of 1961, photographic coverage for a series of other joint-service exercises was furnished. Among them were Operation SWIFT STRIKE, an extensive Army-Air Force training maneuver conducted in the Fort Bragg-Fort Jackson area of the Carolinas in August, and CHECK MATE/SCRAP IRON, a NATO training exercise, concluded in late September in southeastern Europe, after a period of intensive mock-warfare, in which thousands of American, Greek, and Turkish soldiers, sailors, airmen and marines participated. Also recorded

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*Not all footage pertaining to joint-service operations was reworked into FRs or SFPs.

**MATS also furnished airlifts in other operations in which such service was required.

***The film was designed to give ZI and oversea military and civilian personnel a better understanding of USAF and TAC objectives; and to increase the operational effectiveness of military personnel participating in similar exercises by reducing instructional time through use of the film medium.

****Filming of the departure of a contingent from Pope AFB, N.C. was done by cameramen from the 1365th Squadron.

photographically was an air-defense test -- William Tell III (FR 196) -- in which outstanding fighter-interceptor teams were assembled at Tyndall AFB, Fla., for participation in a realistic defense exercise.

In 1962, APCS cameramen again traveled thousands of miles to record combined-service operations. For documentation of LONG THRUST III (FR 183),* a maneuver involving the transatlantic airlift of almost 5,300 American troops from the United States to West Germany in January, 20 cameramen of the 1365th Squadron were on TDY for 25 days (January-February).** Photographic locations were Charleston AFB, S.C., McGuire AFB, N.J. Lajes Field, Azores; and Rhein-Main, Germany. During a similar period of TDY in February, members of the same unit recorded various phases of BANYAN TREE III, an exercise in which TAC and STRAC units, under direction of the U.S. Strike Command, conducted annual war games in the Canal Zone, in conjunction with the Caribbean Air Command. Motion-picture and still photography was accomplished at Pope Air Force Base, S.C., the deployment station; at Ramey AFB, the Puerto Rican staging area; and in Panama, C.Z., where the exercise was conducted.

In early May 1962, Operation QUICK KICK, one of the principal Atlantic Command exercises of the year, again took cameramen of the 1365th to the Carolinas, where the latest methods and weapons of warfare were being tested in a combined-service operation involving Air Force, Army, Navy, and Marine components. Conducted from Shaw AFB, S.C., by the Commander, Nineteenth Air Force, the operation included a coordinated land-sea-air triphibious assault on a Carolina beachhead.

Also documented by APCS cameramen during the remainder of the year were several other exercises of importance. Exercise LONG THRUST IV, another air mobility operation to test command and logistical capabilities for reinforcing NATO defenses in Europe was held 9-11 July. Photographic coverage included departure of the C-130's from Forbes AFB, Kansas, and arrival of the planes at Frankfort, Germany. In this instance, MATS aircraft not only transported about 2,000 infantrymen from the United States to Germany, but brought back from Europe one of the battle groups flown there in January 1962 during LONG THRUST III.***

In early August 1962, motion-picture teams of the 1352d Photo Group were deployed to Camp Carson, Colo., to cover onloading operations for SWIFT STRIKE II. Documentation of the exercise - offloading, deployment, and strike phases - were, however, accomplished by cameramen of the 1365th Photo Squadron dispatched to Sumter, S.C.

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*LONG THRUST II, a large - scale NATO mobility exercise, in which combat troops were to be airlifted from CONUS to Europe, was planned for the late spring of that year. Because of a tense international situation at that time, the operation was cancelled on 29 April. For that reason, LONG THRUST III is sometimes listed as LONG THRUST IIA.

**Cameramen from Detachment 3, 1365th Photo Squadron at Lindsey Air Station, Germany, also participated in documentation of this exercise.

***LONG THRUST IV was the first exercise in which rotating Army units were flown to Europe and back to CONUS, by using the same aircraft in each direction.

Another large photographic project, undertaken by APCS cameramen was William Tell IV, the Tactical Air Command's World-Wide Weapons Meet and air demonstrations, held at Nellis AFB, Nevada, in early September 1962 - at the time of the annual Air Force Association Convention in neighboring Las Vegas. Major events - including features of the AFA sessions - were recorded photographically and a televised version of the significant activities presented. Included in the military operation was air-to-ground, air-to-air, and ground-to-air televised coverage of weapons delivered at ranges located forty miles from Las Vegas.

Projects Requiring Quick Response

In addition to their programmed workload, APCS photographic components often have been called upon to provide documentary coverage of unforeseen events -- a type of service which their world-wide locations and the demonstrated combat readiness of their operational capacity have always enabled them to furnish satisfactorily.

Alerts

Lebanon Crisis: When, soon after midnight on 16 July 1958, the 1363d Photographic Flight* at Lindsey Air Station, Germany, was informed of the critical situation in Lebanon, arrangements were promptly made for a camera crew to depart for the troubled area at 0400 that morning. Traveling aboard an air-evacuation plane carrying the USAFE Task Force Commander, the cameramen were in place prior to arrival of the airborne and Tactical Air Command units. Initial footage covered movement of Army personnel from Fürstenfeldbruck, Germany, to Adana, Turkey; and from the staging area there to Beirut. Later sequences showed paratroopers hurrying from their planes with packs and gear; the unloading of heavy equipment from C-130's; the visit of the American Ambassador to the troop area; and the Air Force advance party digging ditches. Since the decision to send paratroopers of the 1st Battle Group to the Middle East apparently had caught most commercial media by surprise, the coverage supplied by the 1363d Photo Flight was reported to be the most complete documentation of this maneuver available.

Taiwan Alert: A similar project, undertaken by the 1362d Photographic Flight** at Yokota Air Base, Japan, resulted from the crisis that developed in the late summer of 1958 from disturbance fomented in the Formosa Strait by Communist Chinese. At the beginning of this emergency, a camera team was immediately dispatched to Taiwan, to cover all activities connected with the Air Force buildup at Chinese Nationalist airfields. A few days later, a second team was furnished; and a cameraman was loaned to the Fifth Air Force, to aid its information personnel sent on TDY to the island. To the Taiwan effort, the 1352d Motion-Picture Squadron*** also contributed a small group that joined the 1362d's teams in Formosa and spent ten days in assisting them in documenting events related to the crisis. Throughtout the emergency, other cameramen of the Flight were, at various times, recording activities at bases on Okinawa, Korea and the Philippines.

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*This unit was replaced in mid-1960 by Det.3, 1365th Photo Squadron.

**In existence until 30 June 1960.

***Designation later changed to 1352d Photographic Group.

Berlin Crisis: Another project of a slightly different character arose in April 1959, when Headquarters MATS had immediate need for route-briefing films during the Berlin Crisis. This undertaking, recorded on five reels, was completed by the 1365th Photographic Group (later Squadron) in seven working days of intense effort, which included initial release of the required black-and-white prints. Although production of the four classified projects taxed the endurance and skill of the unit's operational personnel, the assignment illustrated the type of demand that would be made upon the organization in case of a national emergency - and illustrated the capability of the unit to meet such a test.

Cuban Crisis: When the Cuban Crisis arose, it was understood that the Air Photographic and Charting Service, by the very nature of its mission, would provide, for historical purposes, still and motion-picture documentation of events connected with this emergency. As a secondary responsibility, its photographic teams would also satisfy the need of SAFOI and other authorized agencies for coverage of perishable news.

During the thirty-odd days that the alert was in effect (22 October - 28 November 1962), the 1365th Photographic Squadron deployed camera teams to 15 key positions in Florida, Georgia, North Carolina, Kentucky, and Indiana. Greatest effort was, however, expended at the airbases in central and southern Florida, where the buildup of aircraft, men, supplies, and equipment was concentrated. Smaller teams were also sent to Bermuda and the Azores, to photograph the aerial surveillance of Cuba-bound shipping. To meet an emergency, remote camera pods were fabricated in short order and hung on other aircraft -- a critical situation that provided an excellent opportunity to test their effectiveness.

Through courier service established on a daily basis, exposed film was delivered to the 1365th Photographic Squadron, and supplies and equipment were forwarded to crews on location. To help the unit in meeting these demanding needs, a contingent of 26 airmen and 5 civilians from the 1352d Photographic Group arrived at OAFB on 25 October, to assist in motion-picture and still-photo laboratories, and in maintenance and camera divisions. Although its workload was extremely heavy during the alert, the 1365th, with this support, was able to discharge its responsibilities speedily and efficiently.

Mercy Missions and Humanitarian Projects

In recent years, the alert status of APCS camera crews was also shown in their prompt procurement of footage concerning goodwill missions of historical significance, flown for humanitarian purposes or the alleviation of suffering caused by unpredictable national disasters.

In 1960, for example, numerous projects of these types were documented by the 1365th Photographic Squadron. Cameramen from its detachment at Lindsey Air Station, Germany, recorded the airlift of food, blankets and medical supplies to a cyclone and tidal-wave devastated area of East Pakistan; and the delivery of medical supplies and equipment to Dr. Albert Schweitzer in French Equatorial Africa. Two sergeants from its component at Elmendorf AFB, Alaska, in January 1960, filmed the evacuation of personnel and equipment from Ice Station Charlie,

a scientific research post located on a disintegrating ice floe in the Arctic Ocean. Meanwhile, the 1365th proper had responded, on two-hour notice, to a requirement for documentation of the USAF airlift of supplies and emergency equipment to Chile, during the earthquake disaster in May of that year.

In 1961, a camera team from Linizey AS was sent on two occasions, to record USAF relief measures extended to flood victims in widely separated regions -- in Kenya and in the Seville area of Spain. At Christmas-time of that year, cameramen from the same unit visited the small Greek island of Antiparos, to film the landing of a USAF amphibian plane laden with clothing, toys and candy for the islanders, most of whom were very poor. These gifts from Americans living in Beirut, Lebanon, and Dhahran, Saudi Arabia, represented a goodwill, people-to-people mission, which resulted from a continuing correspondence that developed, by chance, between two school boys -- one from each of the groups concerned.

In 1962, a four-man photographic crew from Detachment 3, 1365th Photo Squadron, covered rescue activities of Air Force units at Hamburg, Germany, during calamitous floods, which resulted in enormous loss of life and destruction of property. Cameramen also filmed Air Force personnel unloading and distributing relief supplies, collecting clothing, and participating in aerial survey flights over the devastated area. In the spring, a three-man crew traveled some 3,000 miles in planes and helicopters to document a mercy mission to Tanganyika. Upon arrival in the critical area, they filmed the parachopping of food and relief supplies and the distribution of these resources to famine-stricken tribesmen, isolated in their villages by rampaging waters.

On two occasions in September 1962, camera crews from the same Detachment 3 were dispatched to Teheran, to photograph the arrival and distribution of medical and relief supplies for victims of a severe earthquake in central Iran. On the second trip, they photographed scenes of devastation, the erection of temporary housing, the operation of a field hospital and a visit to the area by the Shah of Iran.

In early December, when the United States sent from Europe 14,000 blankets to Tunisia, to aid people made homeless by floods in the southern part of that country, cameramen from Detachment 3, 1365th Photo Squadron, were flown to Tunis. There they documented the arrival of the two C-130's with their much-needed cargo and the immediate transfer of the gift by the American Ambassador to Tunisia to a representative of the Tunisian Comité National du Secours.

On the other side of the world, Detachment 3, 1352d Photographic Group, located in Hawaii, also engaged in a disaster mission late in the year. After it was learned that Guam had been struck by a typhoon on the night of 11 November, a four-man crew began coverage of the stricken island two days later (13 November). The results of their work included still and motion-picture photography of damages and the beginning of rehabilitation. In this case -- as in the other instances described -- footage from the project was released to nation-wide news media and was also used in the appropriate Air Force News Review.

AWARDS AND OTHER TYPES OF RECOGNITION

In the following paragraphs are noted a number of the awards won by APCS and component units. The compilation is, by design, representative rather than all-inclusive. The list also serves as a commentary on the fields of endeavor in which such honors are given. (Arrangement of the material is largely chronological.)

Airpower Trophy

The excellent performance of APCS photographic units and the value of their work received public recognition when the Air Force Association, at its Dallas (Texas) convention in September 1958, announced that its Airpower Trophy had been awarded to the Air Photographic and Charting Service "for the most outstanding contribution to airpower and national security in the field of Arts and Letters" during the previous year.

USAF Outstanding Unit Awards

To 1370th Photo-Mapping Wing (Formerly Group)

In December 1956, the 1370th Photo-Mapping Group earned the Air Force Outstanding Unit Award for completion of the North Atlantic Aerial Electronic Survey Tie during the period June 1953-August 1956. (DAF, GO 71, 6 Dec 1956.)

In April 1960, the Department of the Air Force announced that the 1370th Photo-Mapping Wing had been given the Air Force Outstanding Unit Award (First Oak Leaf Cluster) for the accomplishment of a highly important project between 1 September 1956 and 1 July 1959. (DAF, GO 23, 17 May 1960.)

To 1352d Motion Picture Squadron

For exceptional services rendered from 10 December 1956 to 13 April 1959, the 1352d Motion Picture Squadron received the Air Force Outstanding Unit Award. In the course of this period, the Squadron provided key photographic support to the Air Force Ballistic Missile Division (ARDC) during operations at Cape Canaveral, Florida; and furnished total photographic support for engineering, test and launch operations at Vandenberg Air Force Base, California. (DAF, GO 56, 16 October 1959.)

To 1365th Photographic Squadron

In recognition of exceptionally meritorious service of great national significance during the period 1 January 1959-1 March 1961, the 1365th Photographic Squadron was awarded the Air Force Outstanding Unit Award. (DAF, SO G-59, 26 June 1961.)

AWARDS FOR PHOTOGRAPHIC ACHIEVEMENTS

Diploma and Certificate Awards — For participation in film exhibitions abroad.

For two films -- "The Thunderbirds" (SFP 412) and "Aero-Medical Research" (SFP 390) -- produced by the 1352d Motion Picture Squadron, diplomas were awarded to the United States Air Force by the Jury for the International Exhibition of Documentary and Short Films, held at Venice, Italy in August 1957.*

"The Thunderbirds" was also exibited at the international film festivals that took place in Edinburgh and Berlin in the late summer of that year. For inclusion in these showings, certificates of participation were received by APCS.

"Supersonic Thunderbirds" (SFP 637), a spectacular film produced by the 1352d Motion Picture Squadron for initial showing at the World Congress of Flight in Las Vegas, Nevada, in April 1959, was selected for exhibition a few months later at international film festivals held in Edinburgh and Venice. Certificates, showing representation of the film in both of these events, were later sent to APCS.

In 1960, two APCS films were shown at the International Exposition of Cinematographic Arts in Venice. "Survey of Astronautics" (TF 1-5292),** produced by the 1352d Motion Picture Squadron, was given a Certificate of Merit; and the "Air Force News Review," No 49, the first film in this series presented by the 1365th Photographic Squadron in color, received a diploma of participation. Excellence of these productions as a whole was recognized by inclusion of AFNR No 61, the second annual color production, in the films shown at the same Venice Film Festival in 1961.

Technical Film Festival Awards

At the First Annual Technical Film Festival held during National Engineers' Week in February 1960, two films of the 1352d Motion Picture Squadron received recognition. "The Sandia Story," (LML 90-15A), a film showing the activities of the Sandia Corporation, was awarded a Gold Certificate; and "Living with Radiation" (LML 90-11) won a Class-C Certificate of Merit.

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*"The Thunderbirds" was awarded special mention for photographic excellence -- the only film so honored at the festival.

**This film -- based on present Air Force concepts of space exploration and man's progress in mastering rocket flights -- was adopted by the US Information Agency as an official motion picture to be translated into various foreign languages and shown in other countries, as an outstanding example of the United States space effort.

"CINDY" Awards

Annually the Industry Film Producers Association recognizes outstanding productions in this field by presentation of its "CINDY" (i.e. Cinema and Industry) awards. At the yearly IFPA National Conference and Film Festival, films produced by APCS components have, in the last two years, won a number of these awards in the various categories established:

For 1960 (Awards presented in 1961):

First Award (Indoctrination)	"Taiwan -- Island of Freedom" (AFIF 103).* (A film in the People-to People series.)
Finalist Award (Public Relations)	"Air Force Missile Mission" (SFP 608).* (An explanation of the current Air Force missile concept, with the actor Mr. James Stewart as expositor.)
Finalist Award (Technical Reports)	"Gas Cooled Reactor Experiment" (LML 90-18).* (Produced for the Idaho Operations Office of AEC.)
Finalist Award (For Recruiting)	"Air Force News Review"** (Especially AFNR No 61.)
Finalist Award (For Recruiting)	"School of the Sky" (SFP 493).* (Portrays activities at the Air Force Academy.)

For 1961 (Awards presented in 1962)

First Award (Public Information)	"Aerospace Medical Research at Holloman Air Force Base" (SFP 1020).
First Award (Indoctrination)	"Korea -- Battleground for Liberty" (AFIF 106). (Filmed as part of the People-to-People Program.)***
Finalist Award (Technical Information)	"Photography in the USAF -- Optical Instrumentation at Vandenberg Air Force Base" (SFP 1028). (Depicts one phase of the 1352d's Mission.)

*Produced by 1352d Photographic Group (then Squadron).

**Film made by 1365th Photographic Squadron.

***In recognition of the outstanding contribution made by the 1352d Photographic Squadron in production of this DOD -- CINCPAC Orientation film and "Taiwan -- Island of Freedom", the Squadron received a certificate of commendation from the Department of Defense, in Augus. 1961.

Finalist Award (Out-Plant Category)	"Aerospace Communications -- Reins of Command" (SFP 1021).*
Award of Merit (Technical Reports)	"Basic Principles of Power Reactors" (LML 90-10A).

Nomination For An "Oscar"

"Breaking the Language Barrier" (SFP 1041), which shows the Air Force demonstration team The Thunderbirds on tour around the world, was nominated for an Academy Award (Documentary Short-Subject Class) for 1961. Although the film failed to win an "Oscar" when the Academy of Motion Picture Arts and Sciences presented its annual awards on 9 April 1962, Headquarters APCS and the 1352d Photographic Group received plaques honoring the nomination of the film for consideration in the competition.

Industrial Photography Award

In the 1962 competition held by the magazine Industrial Photography for motion pictures in the In-Plant Category, "Breaking the Language Barrier"-- selected as the USAF entry -- tied with "The Idea of Michigan" (Univ. of Michigan Television Center) as the best general public-relations films. Announcement of the award was made in September 1962.

From Industrial Photography, the 1365th Photographic Squadron received A Certificate of Merit for "Measuring and Mapping the World," a film entered in the 1962 awards competition.

San Francisco International Film Festival

The 1352d Photographic Group received an Award of Participation for its production "Catch a Falling Star", entered at this festival in 1962.**

Safety Film Contest Awards

In 1959, for production of "Nightmare for the Bold" (TF 1-5301), a motion picture dealing with the tragic consequence of careless driving, the 1365th Photographic Group (later Squadron) was awarded a citation by the National Committee of Films for Safety, in recognition of the pictorial excellence of the film.

Two years later (1961), the 1365th received Certificates of Merit for two other films -- "Aircraft Accident Investigation" (TF 1-5348) and "Be Water Wise -- Boating" (TF 1-5192b).

In 1962, the 1352d Photographic Group also was voted a Certificate of Merit for its film "Water Safety -- Guam" (TF 1-5416), produced in the previous year.

*Film prepared and supervised by the 1365th Photographic Squadron, but produced commercially. The other productions winning awards for 1961 were accomplished by the 1352d Photographic Group (then Squadron).

**Two productions of the 1365th Photo Squadron -- "Aerospace Communications -- Reins of Command" and "You in Turkey" (AFIF 114) - also were shown at the San Francisco Film Festival in 1962.

FLYING AND GROUND SAFETY AWARDS

Calendar Year 1960

For its accident-free record during the first six months of 1960, the 1370th Photo-Mapping Wing was awarded the USAF Flying Safety Plaque.

To the 1370th Photo-Mapping Wing, the MATS Outstanding Unit Award for Flying Safety was presented, in recognition of its conduct of accident-free flying operations throughout the calendar year 1960.

For achieving similar accident-free records for the year 1960, MATS Flying Safety Plaques were presented to three components of the 1370th Photo-Mapping Wing -- the 1371st and 1375th Mapping and Charting Squadrons and the 1376th Consolidated Aircraft Maintenance Squadron -- and to two units of the 1360th Air Base Group -- the 1360th Air Base Squadron and the 1360th Materiel Squadron.

The Air Photographic and Charting Service received the MATS Outstanding Unit Award in Flying Safety for having achieved a command- wide, accident-free record in 1960.

This award is usually reserved for a unit of wing or comparable level. The presentation was, however, made to APCS because of the high rating accorded to the Command in the annual competition for the MATS Trophy -- an honor won, in 1960, by WESTAF.

Calendar Year 1961

The MATS Accident-Free Award for Flying Safety during the year 1961 was given to the 1371st Mapping and Charting Squadron (1370 P-M Wing).

The 1372d Mapping and Charting Squadron (1370th P-M Wing) won the MATS Outstanding Unit Award for Ground Safety during the calendar year 1961. This award carries with it the presentation of an engraved plaque and $300 in cash for the Squadron Unit Fund.*

For eighteen months of accident-free operations ending 30 June 1961, the 1370th Photo-Mapping Wing, for the second time, was a recipient of the USAF Flying Safety Plaque.

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*Actually, the 1373d had been credited with no reportable disabling injuries since the fall of 1959. This accomplishment was extremely significant, since the mission of the squadron required all personnel to spend six months on TDY in foreign countries. Many of the overseas areas were in remote locations, where customs, vehicle operation, and living conditions differed widely from those at Turner AFB, the unit's home station.

Calendar Year 1962

For its accident-free record during 1962, the 1371st Mapping and Charting Squadron (1370th P-M Wing) received a MATS Flying Safety Plaque -- the third consecutive year in which the squadron had won this award.

The MATS Outstanding Unit Award for Ground Safety was given to the 1375th Mapping and Charting Squadron in 1962.

In recognition of his competence in coping with an in-flight emergency that arose on a return trip from Macapa, Brazil, to Atkinson Field, British Guiana, on 31 March 1962, Captain Tilman C. Burks, Jr. (1370th P-M Wing) was presented the MATS Individual Outstanding Safety Achievement Award.* (He was the first member of APCS to win this award.)

*After take-off from a rough, dirt-and-gravel airstrip at Macapa, it was discovered that the nose-gear door of the C-130 had not fully retracted and could not be opened by normal or emergency means. However, upon reaching Atkinson Field, Captain Burks completed such a successful "nose-up" landing that damage to the aircraft was relatively slight, and no injuries were sustained by passengers or members of the crew.