



600th PHOTO SQ
TAN SON NHUT AIR BASE
REPUBLIC OF VIETNAM
JAN 1966 THRU JUNE 1968

HISTORY OF THE 600TH PHOTOGRAPHIC SQUADRON

(Formerly Det 5, 1352nd Photographic Group.)

1 JANUARY 1966 - 30 JUNE 1966

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Commander
17 September 1966



FOREWORD

On the 17th of January 1966 Hq MAC formally advised Hq AAVS and the 1352nd Photographic Group that the formation of the 600th Photographic Squadron was approved by Hq USAF. The message read in part:

Hq USAF has approved organization of a photo squadron with nine dets and one OL in SEA. To provide lineage, AF advises that the Sq will be an AFGON unit. The 13 Combat Camera Sq will be redesignated the 600 Photo Sq, activated, and assigned to MAC for further assignment to 1352 Photo Gp, effective o/s 8 Feb 66. *I*

On the 8th of February 1966 the AAVS unit in SEA, Det 5, 1352nd Photo Gp, became the 600th Photographic Squadron charged with the increased responsibility of all Air Force photographic services in Southeast Asia except reconnaissance photography.

Because the period of this history covers the first half of the calendar year 1966 it includes the activities of Det 5, 1352nd Photo Gp from 1 Jan 1966 through 7 Feb 1966 and the activities of the 600th Photo Sq from 8 Feb 1966 through 30 Jun 1966.

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I MISSION AND RESOURCES

A. Background

Hq PACAF on 8 Sep 1965 requested that Hq USAF provide the equipment and manpower needed to accomplish seven photographic missions in SEA.

1. Gun camera photography.
2. Increased documentation of air strikes.
3. Base photo laboratories.
4. Increased documentation of Air Force activities.
5. Color motion picture processing at each fighter base.
6. KA-60 strike photography.
7. Scope camera photography. **2**

Air Force Hq directed APCS (now AAVS) to develop and submit a study of manpower and equipment requirements to meet the PACAF request and to further assume that these functions would have a single manager. **3** On 18 October 1965 APCS completed its study of the problem of establishing a single manager for SEA photography. A visual briefing was presented to Hq MATS (now MAC) on 19 October 1965 and to Hqs USAF on 1 November 1965. **4**

In brief, the solution is to establish a photographic squadron at Tan Son Nhut and nine additional detachments located at Korat, Bien Hoa, Da Nang, Takhli, Ubon, Udorn, Cam Ranh Bay, Phan Rang and Qui Nhon. The squadron and nine detachments would consist of a combat documentation crew, a base photographic laboratory and as many of the following specialized cells as local conditions require.

- a. Gun camera cell.
- b. Pod camera cell.
- c. Scope photo cell.
- d. KA-60 strike photo cell. **5**
- e. Motion picture laboratory.

At the 1 November meeting Hq USAF directed APCS to present initial detailed plans by 5 November for the establishment of two photo units in SEA. These two units would be an interim measure calling for a UMD increase of twelve slots for Det 5, 1352nd Photo Gp. APCS formulated a plan, and the UMD slots were authorized. **6**

On 10 December 1965 Hq USAF approved the APCS plan MORE PIX which detailed the establishment of a squadron with nine detachments. 7 Finally on 10 January 1966 the plan (AAVS Operations Plan 501) code named MORE PIX was published and distributed. In addition to nine detachments the 501 plan also called for an operating location consisting of four enlisted men and one officer who would be operationally controlled by Hq MACV at Saigon.

In a large part the history of Det 5, 1352nd Photo Gp and the 600th Photo Sq from 1 January 1966 to 30 June 1966 is the story of MORE PIX implementation.

B. Mission

The mission of the 600th Photographic Squadron is to provide Headquarters USAF, PACAF and Seventh Air Force with all required motion picture and still photographic services and products exclusive of reconnaissance photography.

The mission specifically covers:

1. Combat Documentation (Comdoc) which is the primary mission of AAVS. This includes covering all USAF activities as outlined in AFR 23-22. Comdoc photography is used for historical documentation, command post clips, AAVS film projects including the Air Force News Review, and information releases.
2. Aircraft Gun Camera Photography obtained from most tactical fighter aircraft.
3. Aircraft Camera Blisters and Pods which record motion picture and still photography of air strikes from F-100's, F-105's, F4C's, A1E's and B-57's
4. Aircraft Radar Scope Photography of radar scopes using KA-26B scope cameras
5. KA-71A (formerly KA-60) Aircraft Strike Photography which consists of 70mm panoramic strip photographs from strike aircraft. The product of the KA-71A cameras is primarily used by intelligence.

6. Motion Picture Laboratory Services at four locations which consists of 16mm color film processing.

7. Base Still Photo Laboratories at ten locations.

C. Command

Colonel James P. Warndorf, FRxxxxx, arrived in Viet Nam on 22 June to begin his duties as AAVS Command Representative in SEA and to assume command of the 600th Photo Sq relieving Major Howard Landau, FVxxxxxx, who had served as commander since 21 May 1966. From 1 January 1966 to 20 May Major Howard J. Price, FRxxxxx, commanded the 600th Photo Sq.

D. Organization

The 600th Photo Sq is a sub-unit of the 1352nd Photo Gp, within the Aerospace Audio-Visual Service (AAVS). Upon activation the unit was allocated an authorized manning of 10 officers and 398 enlisted personnel. During the past six months emphasis has been placed upon establishing functions, procedures and facilities essential for fulfilling the AAVS mission in Southeast Asia. At Tan Son Nhut Air Base the organization is divided into four staff sections; Supply, Maintenance, Administration, and Photographic Operations. Each of these are further divided into sub-sections which are all oriented towards accomplishing Photographic documentation of Air Force Activities in SEA.

Generating from the above nucleus under Project MORE PIX I are nine Detachments located throughout Vietnam and Thailand, and one operating location in Saigon, Vietnam. 600th Photo Squadron detachments, with locations indicated, include the following:

- a. Det 1, 600 Photo Sq, Korat AB, Thailand
- b. Det 2, 600 Photo Sq, Takhli AB, Thailand

- c. Det 3, 600 Photo Sq, Ubon AB, Thailand
- d. Det 4, 600 Photo Sq, Cam Ranh Bay AB, Vietnam
- e. Det 5, 600 Photo Sq, Phan Rang AB, Vietnam
- f. Det 6, 600 Photo Sq, Bien Hoa AB, Vietnam
- g. Det 7, 600 Photo Sq, Da Nang AB, Vietnam
- h. Det 8, 600 Photo Sq, Tuy Hoa AB, Vietnam
- i. Det 9, 600 Photo Sq, Udorn AB, Thailand

E. Personnel

The Administrative Section of the 600th Photo Sq is responsible for providing necessary administrative services in support of the over-all squadron mission and to assist the Commander in providing personnel services relative to assignments, training, career progression, quality control and general welfare of assigned personnel.

As of 1 Jan 66, Det 5, 1352d Photo Gp consisted of 2 officers and 42 airmen against an authorized strength of 4 officers and 52 enlisted personnel. Key personnel at that time were:

- a. Major Howard J. Price, Commander
- b. 1st Lt Richard A. Ruddy, Operations Officer
- c. 1st Lt Peter S. Vogt, Project Officer (TDY to this unit)
- d. MSgt Barney C. White, NCOIC Operations, and Acting First Sergeant
- e. TSgt Albert G. Doucet, NCOIC, Still Photo Services
- f. SSgt Ernest M. Fukuda, Chief Clerk
- g. A1C Robert E. Jenkins, Motion Picture Editor
- h. MSgt Gerald B. Anderson, MOPIC Lab

Immediately following the activation of the 600th on 8 Feb 1966 a rapid build-up of resources began in order to support more and more demands for

photographic coverage of Air Force activities in this theater. Equipment and personnel flow began to constantly increase and command assistance teams from Hq AAVS, and 1352d Photo Gp were dispatched to the 600th on extended TDY. This was to insure that the newly formed unit would be tempered into an operationally ready unit within minimum time.

Key Staff Officer and enlisted personnel reported during the period February through June of this year; faced with a gigantic task lying ahead. The following individuals reported during this period to occupy Key positions in what was destined to become a vast organization with facilities capable of providing photographic services throughout all of Southeast Asia:

a. Captain J. Robert King Jr reported during February 1966 and assumed duties as Operations Officer. 1st Lt Lowell G. Lee also reported during this month becoming the OIC of MACV Photo Team located at OL 1, Saigon, RVN. 1st Lt Joseph G. Tarpley completes our list of key personnel arriving in February. He was immediately assigned duties as Project Officer, responsible for obtaining accurate, quality motion picture and still photo stories on the Air Force in action.

b. The Squadron acquired its First Sergeant in March when MSgt Leon P. Bashaw reported for duty; dedicated towards enhancing the benefits and overall morale of the troops. During this month, we also had five other key enlisted men process PCS into the unit: SMSgt Jerry Marcella, NCOIC of Operations and MOPIC lab unit; TSgt Cleon E. Simmons, NCOIC, Supply Section; SSgt Charles E. Lanier, NCOIC of Film Control; AIC Melvin T. Delaney as AIC of Sound Division; and AIC William A. Shuey, Personnel Clerk. With the gain of Airman Shuey the personnel office for this squadron was activated as part of the Administrative Staff Section. Policies and procedures were established,

personnel processing initiated at Squadron level, liaisons established with CBPO and other essential personnel functions organized in accordance with existing directives.

c. The period April through May was as significant as the preceding months in that the remainder of the Command Staff of the 600th processed PCS into the organization. Major Howard B. Landau arrived as special assistant to Colonel Alterio Gallerani, Commander, 1352d Photo Gp, who was at that time on extended TDY to 600th as a member of the AAVS Command Assistance Team. Major Landau assumed duties as Commander, 600th Photo Sq when Major Howard J. Price departed PCS on 21 May 66. Other officers arriving during this period include:

(1) Major Bruce A. Rummer, who was first assigned to Squadron Hq's at Tan Son Nhut and after a brief indoctrination was further reassigned to Korat AB as Commander, Det 1, 600th Photo Sq. In this capacity he has also been functioning as Squadron Commander's Liaison Officer for all Squadron Detachments located in Thailand.

(2) 1st Lt Eric E. Anderson, Jr., whose initial duties involved writing a Policy Manual on Squadron Photographic Operations in conjunction with Captain King. He was later assigned duties as Commander, Det 2, 600th.

(3) 1st Lt Mitchell Walton arrived 2 May 1966 and assumed duties as Administrative Services Officer.

(4) 1st Lt Max E. Furrer was also gained during this period as OIC of Supply.

(5) 1st Lt Douglas Burrow reported on 8 May and was shortly assigned to Det 6 at Bien Hoa AB as Commander.

(6) On 22 June 1966 Col James P. Warndorf arrived and assumed command of the 600th Photo Sq.

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Key Personnel

Col James P. Warendorf, Commander
MSgt Leon Bashaw, First Sergeant
Maj Howard B. Landau, Operations Officer
Capt J. Robert King, Asst Operations Officer
1st Lt Richard A. Ruddy, Chief of Documentation
1st Lt Mitchell Walton, Admin Svcs Officer
1st Lt Peter J. Ott, Chief of Maintenance
1st Lt Max E. Furrer, Supply Officer
1st Lt Lowell Lee, Commander OL 1
Maj Bruce Rummer, Commander Det 1
1st Lt Joseph Tarpley, Operations Officer Det 1
1st Lt Eric E. Anderson, Commander Det 2
SSgt Pat Abernathy, Commander Det 3
TSgt Galen Arseneau, Commander Det 4
MSgt Itnadius P. Gladek, Commander Det 5
1st Lt Douglas Burrows, Commander Det 6
MSgt Verlie D. Stonehocker, Commander Det 7
MSgt Sherman Swanger, Commander Det 9

F. Equipment

Major items of equipment available to motion picture cameramen, still photographers and for recording air strikes included:

6 - 35mm Motion Picture Cameras
27 - 16mm Arriflexes
32 - 35mm Pentax and Nikon Still Cameras
17 - 120 Bronicas and Mamiyflexes
42 - 4x5 Graflex Still Cameras
36 - 16mm Milliken Cameras
23 - Type IV Camera Pods
26 - N-9 Gun Cameras
16 - Hico Mod "K" Electronic Flash Units
78 - Light Meters

G. Funds

Funds for the operation of the 600th Photo Sq until the end of Fiscal Year 1966 continued to be allocated through Det 3, 1352nd Photo Gp at Hickman AFB, Hawaii. TDY orders were published by the 377th Combat Support Group (formerly 6250th Combat Support Group). The fund cite was supplied by Det 3, 1352nd Photo Gp. Copies of these orders were forwarded for obligation of funds.

II OPERATIONS

A. Background and Major Problems

"Because of the increased emphasis on the pod program, which involved many comdoc men, the comdoc mission suffered for several months until a team of five cameramen arrived during October." 8 The preceding sentence is quoted from the Det 5, 1352nd historical report for 1 July 1965 through 31 December 1965. This sentence tersely points out the major operational problem of that period, not enough people to properly handle the comdoc mission of the detachment. During the period of this historical report that problem was eventually solved with the partial implementation of the MORE PIX Plan. Two new operational problems were paramount during the first half of calendar year 1966.

Concurrent with an increase in personnel, the MORE PIX plan generated a problem of space. Both facilities and equipment lagged behind rapid personnel expansion. Work space was critical from February through late June. For a several week period the comdoc crews had no place to work from. Film Control shared half of a small quonset hut with Maintenance. The Operations/Admin trailer was a constant din of voices, telephones and traffic. The simple lack of privacy in Operations and the constant interruptions caused serious delays in getting work started or followed through. By the end of June a large trailer pad was completed and three house trailers were occupied, one by the Commander and Admin Staff, one by Still Photo Services and the other by Film Control. By that time maintenance was occupying a small Frueheuf trailer as was Comdoc. The new trailers relieved the problem considerably.

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pic8b

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A second major operational problem concerned manning. Efforts by the Operations Office to make headway in new mission areas became increasingly difficult as these new areas grew in complexity. It became apparent by late May that a considerably larger Operations staff was needed. The 23 June 1966 AAVS Weekly Activity Report detailed the needed increase.

A letter has been forwarded to Det 7, Hq MAC, indicating that we do not presently have sufficient personnel authorized to properly staff and manage an operation of the Southeast Asia magnitude. In order to provide the necessary talent and technicians to achieve our photo goals in SEA, the following additions to the present 600th Photo Sq have been requested:

- (1) 1 Capt to monitor all motion picture and still labs, gun camera, pod, blister, scope, and KA7IA photography, including development and refinement of new techniques.
- (2) 1 Capt to monitor both the joint IO/AAVS news team and the IO still photo effort to include all photographic assignments and related print production; monitor, assign, coordinate and plan the entire still and motion picture documentary effort for the 600th Photo Sq and detachments.
- (3) 3 Admin Clerks to assist the chief of documentation; to assist the chief of technical services and to assist the operations office.
- (4) 4 Documentation/Producer/Director Project Officers all under the Chief of Documentation to be utilized within the theatre as necessary. One will head the joint AAVS/IO news team. **9**

B. Blister Photography

In mid-February Mr. Les Elliot, Mr. Ray Santini and Mr. Al Cissna of the 1352nd Photo Group arrived in SEA to make a series of tests of the first three blister-equipped aircraft and to train 600th Photo Sq personnel in their operation. One each F-100, F4C and F-105 blister equipped aircraft was deployed from the states for the test and for permanent assignment in the theatre. The blister, differently configured for each aircraft, is designed to record on 16mm film the impact of weapons. Both a forward and rearward facing camera is activated by the pilot automatically. The blister does essentially the same job as the camera pod, but does not occupy an ordnance

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station; it is aerodynamically clean.

600th Photo Sq technicians and cameramen were quickly checked out in the relatively easy operation of the blister system. The large amount of blister photography accomplished since February has shown conclusively that the blister is a fine system for recording tactical air strikes. By 30 June 1966 only the three original blister aircraft were in operation. By 31 December 1966, 20 F-105's, 25 F4C's and 20 F-100's should be blister equipped and recording air strikes over North and South Viet Nam. **10**

C. Skypoint Photography.

Skypoint air strike photography over North and South Viet Nam from the type IV camera pod, from backseat side chase and from the camera blisters was noticeably more successful during this historical period. The paramount reason for the quality and quantity increase was the 600th Photo Sq's ability to quickly process locally and return a print of the film to the photo pilot who flew the photo chase mission. Not only did this give the pilot a chance to quickly critique himself while the mission was still fresh in his mind, but more importantly it generated enthusiasm which was generally lacking among the photo pilots during the last historical period.

Concerning out of country missions the 600th Photo Sq worked more closely with 7th Air Force Intelligence and Strike Plans. A daily routine of studying targets recommended for air strikes by 7th Air Force Intelligence and making recommendations for photo chase missions to the strike planners paid off with photography of more lucrative targets. Two missions are particularly noteworthy. On 31 May 1966 the largest air raid against North Viet Nam up to

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that time was carried out against the Yen Bay storage area. Riding in the rear seat of an F4C equipped with two type IV camera pods, A2C Virgil Siers, AFxxxxxxx recorded a portion of the air strike. Two F-105 strike aircraft equipped with pods also participated and recorded the launch of a SAM missile. Although footage of the strike was poor, extensive back up documentation on the ground at the launch bases was effectively carried out on short notice. The raid prepared the squadron to respond to an even bigger air raid on 29 June against the Hanoi oil fields. Not only was ground documentation at the aircraft launch bases superb, but this time over-the-target documentation (using only the type IV camera pod) was the most spectacular ever recorded.

The bulk of in-country Skypoint missions were of F-100's in action. The lower flying aircraft and the different ordnance loads made for a generous quantity of spectacular F-100 strike footage. Every type of F-100 ordnance load was thoroughly photographed. In addition to being excellent documentation, the 600th Photo Sq pod and backseat footage was useful in a study made on causes of napalm igniting prematurely.

Besides the F-100's in-country, the type IV pod was used on B-57's out of Da Nang Air Base. Excellent footage of the B-57's in action was obtained despite a serious problem of vibration which ruined photography of many good air strikes. The vibration was caused by the close proximity of the pod to the wing mounted engine, and no simple solution to the problem could be found. Use of the pod on the B-57 was discontinued because the Da Nang pods were needed on more important missions elsewhere.

During the first week of June two pods were moved TDY to Cam Ranh Bay Air Base to obtain strike photography of F-4C fighters in support of Tiger Hound, project 600/6117. The 12th Tactical Fighter Wing was enthusiastic about the camera pod mission, and as a result of their pilot interest the photographic results were excellent. Before June ended the Wing asked that we continue on a permanent basis to fly pods and backseat missions with the F-4C's.

A level of twenty serviceable pods was maintained to support the Skypoint program. Nine pods were lost in action during this reporting period.

D. Gun Camera Photography

Until late April the squadron had not become involved in the gun camera program beyond providing a small amount of film to the 3rd Tactical Fighter Wing at Bien Hoa Air Base and processing it for them. In April the pressure to support the gun camera program reached the point where immediate action was necessary. The Director of Operations for 7th Air Force, Brig Gen Simler, was prepared to buy 96 commercial, 8mm home movie cameras and strap them into the aircraft. *II* At this point the 600th Photo Sq became involved in developing an interim gun camera system for F-105's until the existing KS27C gun camera system was properly modified for practical operation. The 1352nd Photo Group had been working on the KS27C problem.

Using modified N-9 gun cameras and magazines, Det 2, 600th Photo Sq, during the week of 21 April, began testing a system which involved placing the gun camera in the cockpit. Because of a lack of space to face the camera looking forward through the windshield, it was placed at right angles

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to the fuselage of the aircraft and recorded its imagery through a mirror. The system proved unacceptable because too much stray light was picked up by the mirror and the image reaching the camera was inverted because of the single mirror. The latter reason was also one of the objections to the KS27C internal gun camera system.

The internal system was given a thorough testing without modification of any kind; it was impractical on many counts. The magazine was difficult to load; the camera is located in a very awkward position and required a complex optical system; a single mirror in the optical system delivered reversed imagery to the camera. Meanwhile Lookout continued to try to make this system workable, but in the interim a better system had to be found.

In June Det 2 started experimenting with a periscope prism assembly from the F-100. Results of initial experiments with the F-100 system in the F-105 were very promising. By the end of June this was the status of the F-105 interim gun camera program.

The 600th Photo Sq was not further involved in gun camera photography by 30 June because motion picture labs to process color gun camera film did not exist except at Tan Son Nhut. Large numbers of modified gun cameras and magazines were not yet available, and there were not yet sufficient personnel to man the program at the various detachments.

E. Combat Documentary Photography

During most of this historical period the Comdoc section of the 600th Photo Sq was not yet up to full strength, but by 30 June full strength was realized. In addition to working on comdoc assignments, many cameramen continued to hang camera pods or learn the operation of the blister cameras.

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pic13b

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pic13c

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The demand for cameramen at jobs other than comdoc made it impossible to maintain the concept of camera crews. Instead a pool of cameramen comprised the comdoc section. As projects were generated by Operations, a crew was made up from whoever was available. This was a less than desirable situation. A cameraman was never quite sure who his boss was, and it was completely impossible to build strong esprit de corps. In addition, facilities for cameramen were sub-standard at best. During most of the period the cameramen shared a small quonset hut with Film Control. When the PCS Maintenance people arrived in full strength they were given this space, and Comdoc did without any facilities for some weeks. The circumstances were depressing for the cameramen and reflected often in their work.

In May, as our strength grew, an attempt was made to form two news teams from the joint resources of the 600th Photo Sq and the 7th Air Force Information Office. 7th Air Force IO contributed a Lieutenant to be a writer/coordinator, a sound man and a TSgt writer. The 600th Photo Sq added four motion picture and two still men. In addition a Lieutenant, who arrived TDY from the 1365th in June, was also assigned to the news team. The goal of the two teams was four stories on motion picture and still film each week. The concept worked to an extent, but it became apparent that the way a comdoc team shoots a story is essentially the same way a news team shoots a story. What resulted was the permanent loan of the TSgt writer and soundman to the 600th Photo Sq who could work with any of four comdoc teams on a floating basis. This idea seemed promising by the end of June.

In order to assist the 600th Photo Sq with its comdoc program, Mr Jack Nichols, a writer from the 1352nd Photo Group, arrived for a forty-five day tour on 30 March. Mr Nichols was assigned a permanent crew consisting of

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TSgt Elmer Greene, SSgt Arnold Magill, A1C Richard Hatcher and A2C Wayne

Hilt. Mr Nichols and crew accomplished a number of projects including:

5-52/633, AC-47
600/6127, Phan Rang Story
600/6128, 310th Air Commando Livestock Drop
600/6143, Air Force Donates Funds for Thai High School

On 11 June 1966 1st Lt's Peter S. Vogt and Christian I. Nyby arrived TDY from the 1365th Photo Sq to work as project officers. They were scheduled to remain for ninety days as an interim measure until PCS project officers would arrive. During the first few weeks of their TDY their value as project officers to assist Operations was already felt.

The most significant technical development for comdoc was a change from 35mm motion picture film to 16mm. Twenty-seven 16mm Arriflex cameras arrived in May. A problem of consistent underexposure by all cameramen for a period of several weeks after the cameras arrived ruined several fine projects. After extensive study of the problem it was discovered that the company contracted to process the film in the states was processing incorrectly.

F. Detachment Operations

During the early months of the year the 600th Photo Sq detachments were manned and equipped to accomplish little other than backseat side chase and pod photography. As the MORE PIX influx of people came into the theatre during April and May the detachments became considerably over manned. Personnel programmed for the blister, KA7IA, and gun camera missions arrived considerably before their equipment and months before their missions were operational. Many photographers found themselves without cameras. Of 47, 16mm Arriflex cameras, only 27 were in the theatre with the other twenty not programmed until October even though all authorised cameramen were in place by early June.

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Three new detachments came into existence. Det 3, Ubon Air Base, Thailand was closed in mid-March to open Det 9 at Udorn AB, Thailand to obtain pod and backseat documentation of the F4C's at Udorn. In June Det 3 was reopened and the pods, blister and backseat men moved back to Ubon from Udorn to re-establish Det 3. This time, however, three men remained at Det 9 in support of the comdoc effort at that base. Det 4 at Cam Ranh Air Base and Det 5 at Phan Rang Air Base were also opened in June. The men worked from tents at Cam Ranh and from the information office at Phan Rang. Their primary assignment was to meet MORE PIX equipment as it began to arrive, and to initiate their comdoc mission.

G. Motion Picture Lab

The 600th Photo Sq Motion Picture Lab began regular and reliable motion picture printing and processing in early January and continued with almost no difficulty until May when a number of shutdowns were experienced because of cracked chiller blades, broken shafts and peeling emulsion. This brief period of difficulties was short lived, and for the remainder of the reporting period no serious difficulties were encountered.

A major development in the motion picture lab made for a major improvement of Skypoint photography. It was discovered through experimentation that the 600th Photo Sq Motion Picture Lab was capable of processing Eastman Kodak M. S. film and obtain a far superior product as compared with Ansco. Mr Oscar Salow of the 1365th Photo Sq arrived on 23 March to conduct tests to determine the feasibility and advisability of processing M. S. on a permanent basis. His decision was that no problem would be encountered by

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a change to M. S. , and the 600th by early June was using M. S. in the pods and blisters and for backseat photography on a fulltime basis.

H. Still Photography

During the last six months the Still Photographic Section has perhaps been under more pressure than any other section, and has felt more acutely the problems of our increased mission. Early in the year print requirements of enormous magnitude and extremely short deadlines were being received from 7th AF Information Office. Often we did not meet the stated deadline, and even more frequently, turned out print orders of questionable quality. Even admitting that the large quantity print orders were sometimes of questionable justification, the fact remained that our difficulty in responding to such a workload was an in-house problem of inadequate still photo management and quality control.

The trend since January has been a gradual reduction in mass print requirements. Also, the still section was able to discontinue the use of TDY personnel in the lab upon the arrival of several PCS people. The DASA lab trailer arrived in early March and thus made available another production facility for unusually heavy workload periods. Admittedly, the workload has eased and the facilities situation has improved since January, but so too have the management procedures and quality control within the still section. Workorder monitoring to insure correct disposition and meeting of deadlines now has one man's full time attention. Photo material and chemical stocklevels are carefully maintained and coordinated with supply to prevent embarrassing production stoppages, which had several times in the past been due to printing paper and chemical shortages. The controls and procedures in effect by 30 June indicate that the Still Photo Section can adapt to almost any reasonable foreseeable requirement.

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III MAINTENANCE

Maintenance capability was extremely limited between January and April. This was because of an acute shortage of maintenance personnel, tools and spare parts. The few ground photographic equipment maintenance men assigned were used almost exclusively for airborne camera duties. They up-loaded and down-loaded pods and blisters for Skypoint photographic missions.

In April the personnel and equipment authorized by MORE PIX began to arrive. A make-shift maintenance shop was set up in one half of a Quonset hut. The space was completely inadequate, but it was the only space available. At this time maintenance men began a program to repair, clean and identify all photographic equipment that was in storage. Because of a lack of tools and spare parts much of the equipment could not be repaired. This unrepairable equipment was sent to the 1352nd Photo Gp for repair and return.

The problem of tools was alleviated somewhat with the arrival of tool boxes from the United States. The 404X0 tool box was entirely adequate; however the 402X0 tool box was completely inadequate. A comprehensive study produced a list of additional tools required to perform aircraft camera maintenance. This listing was submitted to the 1352nd Photo Gp and Hq AAVS for approval.

In order to establish a supply of spare parts, Lookout Mountain AFS was asked to prepare a list based on the consumption data at that location. When this list arrived all parts were ordered. As additional parts are required they are placed on the list and consumption data determines branch stock level. Procurement of spare parts was the largest single problem area. Much of the equipment to be maintained is not Air Force stock listed. This

necessitates local purchase by Lookout Mountain AFS or an excessive delay in procurement if base supply channels are utilized.

In the first part of June four house trailers purchased under the MORE PIX program arrived. The camera maintenance section was given the task of rehabilitating and remodeling them into offices and work areas. Tools were again a problem for the plumbing, carpentry, and electrical work. The maintenance personnel resourcefully borrowed or otherwise procured all necessary tools to accomplish the work.

During the latter part of June the maintenance personnel moved out of the Quonset hut. The maintenance shop was set up in a Fruehauf semi-trailer which provided more workspace, better lighting and airconditioning. A large part of detachment activity during this reporting period was involved in supporting pod and blister photography missions. Several minor changes in procedures, camera angles and lens settings were necessary due to tactics used by aircraft in SEA. These changes contributed to dramatic photography. Maintenance personnel also assisted in preparing the detachment facilities such as work areas, barracks areas and trailer sites.

IV SUPPLY

The rapid expansion of Project MORE PIX resulted in increased demands and responsibilities for supply. This growth was especially noticeable during April, May and June. Expendable supplies were requisitioned from the 1352nd Photographic Group at Lookout Mountain AFS, California. Equipment items were loaned or transferred to the 600th Photo Sq from various locations including the 1352nd, its detachments and the 1365th Photo Sq, Orlando AFB, Florida. Additional items were requisitioned from the 377th Combat Support Group, Tan Son Nhut AB, Vietnam. The responsibility for maintaining accountability for equipment and supplies was divided among several personnel until the first supply man arrived on 23 February 1966 and accepted the responsibility for ordering and issuing supplies and equipment. Seven additional supply personnel arrived in April and began to organize the center at Tan Son Nhut.

An AAVS Assistance Team headed by Colonel Alterio Gallerani, Commander of the 1352nd Photo Gp, and Colonel Alfred R. Gill, Deputy Chief of Material AAVS, arrived on 8 April to assist with the MORE PIX buildup. In addition to assisting with the organization of the supply center the team contacted all detachment locations to negotiate agreements with local commanders.

Supply AFSC's at the supply center included one 6424, four 645X0 and three 647X0. On April 7, the base released building 1109, a 40x100 foot Quonset, to the 600th for a supply warehouse. The 4000 cubic foot refrigeration unit was received, installed and became operational by 1 May 1966. Proper storage conditions for film and paper was not available. Dexion storage bins were built and a complete wall to wall inventory of expendable supplies was

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completed on 19 May 1966. Stock Control and Accounting Records (AF Form 197-1) were prepared on over 800 line items of expendable supplies. Over 650 AF Forms 197-1 were also prepared for each serial numbered item of non-expendable equipment. Consumption, interchangeability, cost and due-in data were maintained on each expendable item. The location of each serialized item was also ??????? on the stock control records. During May, a total of 62 off base shipments were made. In June, the quantity more than doubled to 136. At Tan Son Nhut. 147 line item issues were made during June. Shipments of MORE PIX assets from OOAMA, Hill AFB, Utah increased to the quantity and variety of equipment available to the squadron. Equipment items including cameras, tools, trailers and vehicles were received during the period of 15 May through 30 June. 33 desks, 33 chairs, 15 typewriters, refrigerators, fans, water coolers, vacuum cleaners, and various types of filing cabinets were either received or procured locally.

A. Biography of the Commander

After graduation from XAVIER University, Cincinnati, Ohio and two years of post graduate study at St Louis University, James P. Warndorf entered the Army Air Corps December 30, 1940 as a Flying Cadet; and received his commission on September 15, 1941. He served as an aerial photo officer and opened several stateside photo labs supporting twin engine advanced flying schools and bombardier schools. His training in intelligence and Photo reconnaissance continued at the Air Intelligence School, Harrisburg, Pa., Gainsville AAF, Tex and Will Rogers AAF, Oklahoma City, Okla.

In the spring of 1943 Capt Warndorf shipped overseas to the European Theatre with the 33rd Photo Reconnaissance Squadron and subsequently helped establish the 10th, 67th, and 363rd Photo Reconnaissance Groups. During his service with the 363rd Photo Reconnaissance Group, the unit was awarded the Honor of the Belgian Fourragere by Belgium's King Leopold, for outstanding support during the Battle of the Bulge. Lt Col Warndorf returned to the United States in February of 1946 and entered civilian industry with the Upjohn Pharmaceutical Company at Kalamazoo, Michigan. He did remain active in the reserves, and in March of 1950 was recalled to active duty for a period of 33 months. His immediate responsibility upon recall was as Chief of the Air Material Command Photographic Center at Wright-Patterson AFB, at that time the largest Air Force photographic unit in existence. During this period Lt Col Warndorf elected to remain on active duty indefinitely and was transferred in 1952 to the newly formed Air Pictorial Service in Philadelphia. Air Pictorial Center Headquarters were soon moved to Orlando AFB and Lt Col Warndorf became Chief of Operations for the USAF Photo Center.

In 1954 Lt Col Warndorf became commander of the 1352nd Photo Sq, a post he retained for the next six years. During this period the Lookout Mountain Laboratory in Hollywood was extensively expanded. The Vandenberg Photo unit was established, and the Atomic Energy test programs at the Nevada and Pacific test ranges received impressive photo support. In 1957 Lt Col Warndorf was integrated into the Regular Air Force. August 1955 saw the transfer of Lt Col Warndorf to the command of the 1365th Photo Gp, Orlando AFB, a post he held until April of the following year. In April 1960 he assumed the newly established post of Deputy Chief of Staff for Photography, Hq APCS and was then promoted to the rank of full Colonel.

Since 1960 Col Warndorf has been concerned with the rapid expansion of APCS around the world. The enlarging of the 1369th Photo Sq to a four hundred man unit, the APCS (AAVS) consolidation at Norton AFB, and the massive task of guiding APCS (AAVS) into the future position as single manager for Air Force (non-reconnaissance) photography.

In May of 1965 Col Warndorf was selected by the Department of Defense to direct the DOD Audio Visual Study Group, a study he led for 13 months. The DOD study was completed just in time for Col Warndorf to hurry off to Vietnam as SEA Representative of Commander AAVS and Commander of the 600th Photo Sq.

B. List of Projects

5-52/601	Monthly Documentary Projects	600/6113	SFT 1586 Support
5-52/602	Monthly News Events	600/6115	Air Rescue Support ABC
5-52/603	Skypoint	600/6117	Tiger Hound
5-52/604	Stills	600/6118	Capt Richardson Nooner
5-52/614	Lucky Boy	600/E119	Vietnamese Paratroop
5-52/633	AC-47	600/6120	Intelligence Slide Briefing
5-52/645	Base Documentation	600/6121	12 O'Clock High
5-52/646	Prime Beef	600/6122	Da Nang Airlift
5-52/649	Ordnance Handling in SEA	600/6123	TSN Security Guard
5-52/657	Sec Brown in SEA	600/6124	TSN Mortar Attack
5-52/658	Sen Symington at TSN	600/6125	101st Airborne Airlift
5-52/664	VNAF Aircraft	600/6126	Gen Birchards Visit
5-52/666	Support for 6/52/637	600/6127	Phan Rang Story
5-52/667	Aerial Extension Over Targets	600/6128	310th Air Commando Livestock Drop
5-52/668	Psychological Warfare	600/6130	Prime Beef 16
5-52/669	Visit of Gen Harris	600/6132	Portable Approach Light System
5-52/670	Tv - RVN 620-41-088	600/6134	Gen Blanchard Visit
5-52/671	Real Live Pilot	600/6135	TSN Law Enforcement
5-52/672	Surgeon General	600/6136	Capt Oaks Nooner
5-52/673	497 TH TAC FTR SQ	600/6137	600th Build-up
5-52/674	C-130 Record Airlift	600/6138	OIE Sidfire
5-52/676	Support for FR643	600/6139	Birmingham
5-52/677	Emergency Civil Engineering	600/6140	MIG Killers
5-52/678	Color Negs for PACAF Exhibit	600/6141	Austin 6
5-52/681	RAM Project	600/6143	AF Donates Fund to Thai H. S.
5-52/683	DR Choate (Formerly DR Mines)	600/6144	Cricket
600/685	FAC Familiarization Ride	600/6145	Maj Fisher Nooner
600/686	ARS Slide Briefing	600/6147	Air Weather Service in RVN
600/687	Advisory Group Slide Briefing	600/6148	Project Red Ball
600/688	19th Air Commando Sq	600/6149	RAPCON
600/689	MACV Slide Briefing	600/6150	Lock Box 3
600/690	Jolly Green Giant	600/6151	Gen Estes Visit
600/691	Forest Fire Research	600/6153	F-4Cs at Phan Rang
600/692	TAC RECON Mobile Lab	600/6154	VNAF Celebration at Binh Thuy
600/693	Red Rose	600/6155	PLADS and LAPES Demonstration
600/695	F-102 Coverage	600/6156	School Dedication-Nakon Phanom
600/696	Change of Command-Pleiku	600/6157	MIG Keller Round-Up
600/697	Dr Chapman	600/6158	TSN Base Commander Fairwell
600/698	Air to Air Stills-17th A/C	600/6160	ROK Airlift
600/699	16mm Air Strike for NBC	600/6161	DR Chapman Nooner
600/6100	Premier Ky in F-4C	600/6162	Successful Mission Pleiku
600/6101	First Blister Installation	600/6164	North Vietnam Air Strike
600/6102	F-4C Arrival at Phan Rang	600/6165	Support for P.S.217-6/52
600/6104	8th Bomb Wing	600/6166	Da Nang Evacuation
600/6107	F-4C Air Strike in NVN	600/6167	TSN Fire Department
600/6108	308th Personnel at Bien Hoa	600/6168	Prime Beef Thailand
600/6110	35mm Slides for SAFOI	600/6169	AF Treats Epidemic in Thai Vil
600/6111	Stills of Religious Facilities	600/6170	TV C-121
600/6112	C-141 Embassy Run	600/6171	Mortar Damage Da Nang

600/6172	TSN Busiest Airport	600/6194	Gen Moores Slide Briefing
600/6173	Monsoon Rain	600/6195	Support for FR 661
600/6174	Tiger Hound BDA Special	600/6196	Explosive Ordnance Disposal
600/6176	Congested Traffic TSN	600/6199	AGIL
600/6177	Armed Forces Radio RVN	600/6200	Munitions to Viet Nam
600/6178	TSN Post Office	600/6201	Big Eagle
600/6179	600th Photo Sq Story	600/6203	8th Aerial Port
600/6180	Allied Air Defence	600/6204	Still for SEA Brochure
600/6181	AF Academy Grads	600/6205	Bernstein Story
600/6182	First Day in Vietnam	600/6207	C-123 Operations
600/6183	After Flt Inspection-F-4C	600/6206	Airlift From MACTAN
600/61E4	Crazy Horse	600/6209	County Fair
600/6185	Dust off	600/6211	Blue Canoe
600/6186	USA-VNAF Food Lift	600/6212	Special Mission North
600/6189	Col Cuomo's Kids	600/6215	LAPES Drop of Ammunition
600/6190	Medics Air Orphanage	600/6216	FAC of 1st Cav
600/6191	555th Pilots on Alert	600/6220	Airlift at An Khe
600/6192	Forest Penetrator	600/6221	Gen Moore Fairwell
600/6193	Sand Bag Bunker		

C. Production Statistics

1. Original motion picture camera footage exposed:

35mm ECN	142,345
35mm B/W	100
16mm Color	365,756
16mm B/W	0

2. Still negatives exposed:

<u>Size</u>	<u>B/W</u>	<u>Color</u>
35mm	6,290	18,883
2 ¼ x 2 ¼	9,211	1,634
4 x 5	16,335	904
70mm	2,380	1,182
P-2 Footage	29,400	2,750
Enlargements:	185,569	
Contact Prints:	89,139	

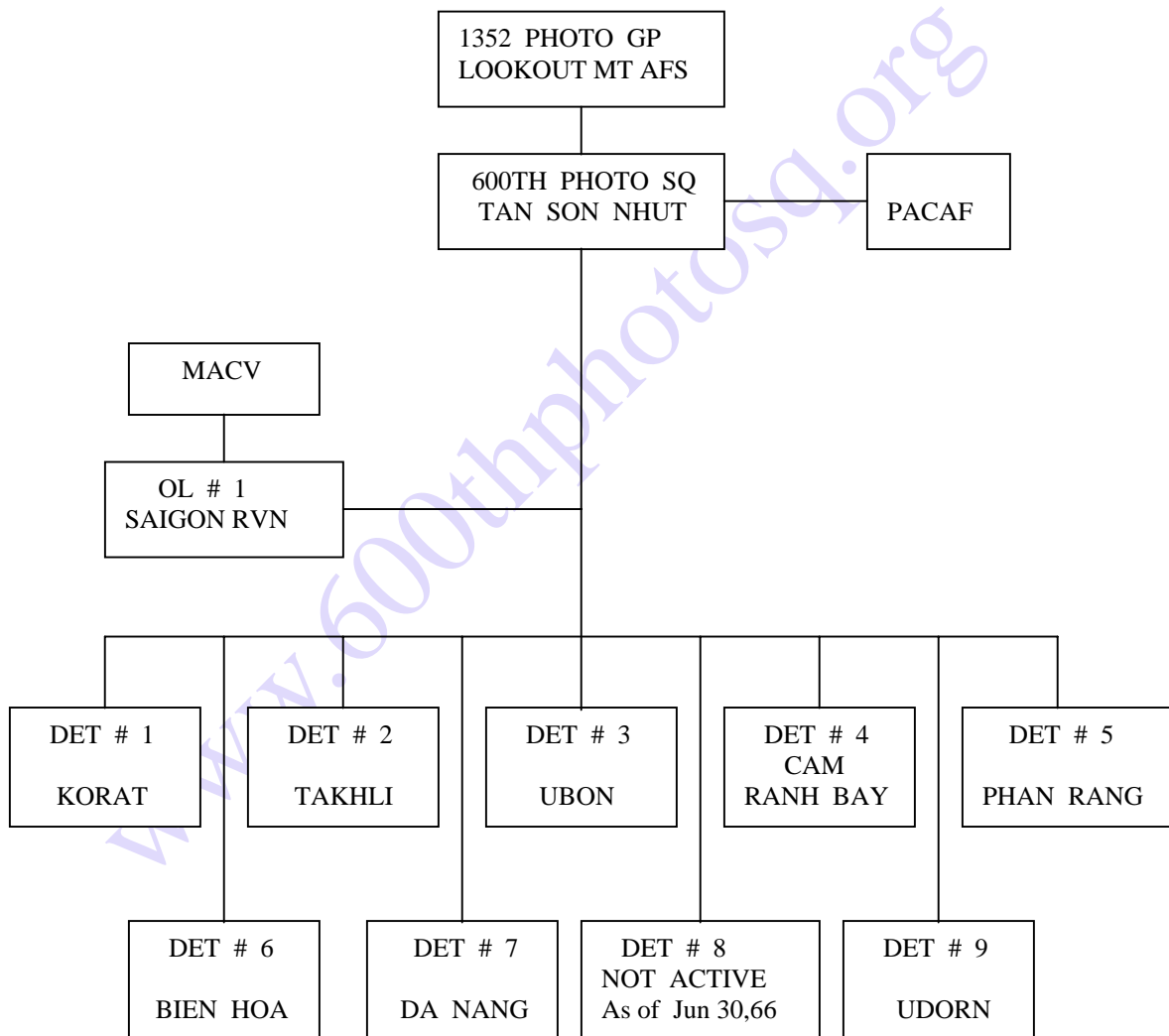
D. Lineage

The 600th Photographic Squadron was activated on 8 February 1966. It was formed from the resources of Det 5, 1352nd Photo Group which was activated at Tan Son Nhut Air Field, Republic of Viet Nam, on 1 January 1963. The 600th Photo Sq is an Air Force Controlled Unit (AFCCN Unit), and as such its lineage dates back to 12 February 1943 when the 13th AAF Combat Camera Unit was formed at Culver City, California. The 13th AAF CCU remained at Culver City until 5 March 1943. It operated from Noumea, New Caledonia from 13-19 May 1943; from Espiritu Santo, New Hebrides from 25 May until 18 Oct. 1943; from Guadalcanal, Solomons from 22 October 1943 until 20 August 1944; from Culver City, California from 7 September 1944 until 19 December 1945. During this

latter period the 13th AAF Combat Camera Unit, on 30 July 1945, was redesignated the 13th Combat Camera Unit. The 13th was redesignated the 600th on 2 February 1966. The 13th CCU was awarded one service streamer and two campaign streamers.

E. References

1. Msg, MAXMOEO 50214 Jan 66, MAC to AAVS, 17 Jan 66 (Secret), downgraded to unclassified by MAXMOEO 06144, Feb 66.
2. AAVS OPS Plan 501, 10 Jan 66, pg 1 and Ltr, Hq PACAF (DOCT) to Hq USAF (AFXOP), 8 Sep 65, Subj: Photographic Capability in SEA.
3. Ltr, Hq USAF (AFXOPX) to MATS (MAXPD), 29 Sep 65, Subj: Photographic Capability in SEA.
4. AAVS OPS PLAN 601, 10 Jan 66, pg 2.
5. 2nd Ind (APCCG/MET 36) to Ltr, Hq USAF (AFXOPX), 29 Sep 65, Subj: Photographic Capability in SEA.
6. AAVS OPS Plan 501, 10 Jan 66, pg 2.
7. Ltr, Hq USAF, 10 Dec 65, Subj: Potographic Build-up in Southeast Asia (SEA), Project "MORE PIX".
8. Det 5, 1352nd Unit History for Priod 1 July 1965 - 31 December 1965. (OPERATIONS - COMDOC).
9. AAVS Weekly Activity Report, 23 Jun 66, pgs 1-2.
10. AAVS OPS Plan 501, MORE PIX, dated 10 Jan 66.
11. Ltr, 1352nd Photo Gp to Commander AAVS, Subj: Minutes of Conference on Gun Camera and Blister Programs.



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