

**360TH TACTICAL ELECTRONIC WARFARE SQUADRON**

**QUARTERLY HISTORY FOR**

**OCTOBER - DECEMBER**

**1966**

**SECRET**

2

HISTORY

OF

360TH RECONNAISSANCE SQUADRON

OCTOBER - DECEMBER 1966

(Unclassified Title)

Assigned to:

460TH TACTICAL RECONNAISSANCE WING, SEVENTH AIR FORCE,

PACIFIC AIR FORCES

Stationed at:

Tan Son Nhut Air Base, Republic of Vietnam

PROJECT CORONA HARVEST

DO NOT DESTROY

No. 02200224

CATALOGED

*Dewey K K Lowe*  
DEWEY K K LOWE  
Major, USAF  
Historian

*James D Alley*  
JAMES D ALLEY  
Lt Colonel, USAF  
Commander

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360RS-67-081

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FOREWARD

The 360th Reconnaissance Squadron was activated on 8 April 1966 at Tan Son Nhut Air Base, Republic of Vietnam, and assigned to the 460th Tactical Reconnaissance Wing.

The mission of the squadron is the performance of two classified airborne reconnaissance projects under the code names "PHYLLIS ANN" and "DRILL PRESS". Unit aircraft assigned under project PHYLLIS ANN are designated RC-47 type aircraft and JC-47's under project DRILL PRESS. The number of aircraft authorized includes seventeen RC-47 and two JC-47 aircraft

Direct accomplishments of the unit's operational activities, their nature and extent, are not ordinarily available because of the highly sensitive nature of mission results. Operation and maintenance of airborne reconnaissance equipment are provided by United States Air Force Security Service.

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CHRONOLOGY

360th Reconnaissance Squadron

<u>Date</u>	<u>Class</u>	<u>Significant Event</u>
October 3	(C)	RC-47 #42-93735 was operationally ready. This aircraft arrived from the U.S. on 2 October.
October 17	(S)	Letter from Comdr, 460th TRW, landing outstanding results of 360th Recon Sq in contributing significantly to ARDF results in the DMZ, praised at a joint J2/NOG briefing Admiral Sharp and Staff General Officers on 29 Sep 66.
October 22	(C)	RC-47 #44-7668 was operationally ready. This aircraft arrived from the U.S. on 18 October.
November 30	(U)	RC-47 #43-48947 achieved 203.7 flying hours during the month of November 66.
December 8	(S)	Ltr from Comdr, 460th TRW, forwarding ltr from 7AF, DCS/I, Commending a 360th Recon Sq ARDF achievement in preventing a possible VC ambush of a U.S. Army Convoy.
December 31	(U)	RC-47 #44-7668 achieved 200.6 flying hours during the month of December 66.

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**INTRODUCTION:**

The continued growth of the 360th Reconnaissance Squadron both in terms of personnel and unit aircraft assignment during the reporting period represented an immediate increase in both mission effectiveness and capability. This was reflected in the substantial increase in the number of missions flown.

Phase II, combat readiness or mission, training for aircrews newly arrived in theater represented another major activity of the organization. Phase I aircraft proficiency training was provided by Tactical Air Command at England Air Force Base, Louisiana. Phase II training was provided by the 360th Reconnaissance Squadron at Tan Son Nhut Air Base, Republic of Vietnam. Combat ready aircrews were subsequently assigned to one of the three units serving Southeast-Asia - the 360th Reconnaissance Squadron; the 361st Reconnaissance Squadron at Nha Trang Air Base, Republic of Vietnam; and Detachment 1, 361st Reconnaissance Squadron, Pleiku Air Base, Republic of Vietnam.

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CHAPTER I

2

MISSION AND ORGANIZATION

MISSION

The 360th Reconnaissance Squadron has two missions as the result of the assignment of two classified projects - PHYLLIS ANN and DRILL PRESS.

PHYLLIS ANN MISSION:

"To conduct daily, day/night, all weather ARDF operations against enemy operated transmitters in the RVN and permissive areas of Laos as a basis for tactical exploitation in support of requirement established by, COMUSMACV and Commander of 7AF".<sup>1</sup>

DRILL PRESS MISSION:

"The employment of these aircraft will be directed by the 7th Air Force Deputy for Operations, under the nickname of "Drill Press". Frag Orders will be published by TACC. These aircraft and aircrews will be employed as Airborne Emergency Reaction Units (ABERU) on reconnaissance missions. The equipment and techniques for collection and data collected on these reconnaissance missions is classified Secret, Limited Distribution, NOFORN."<sup>2</sup>

1. 7th Air Force Operations Orders 450-67, 31 Jul 66.
2. Hq 7AF OPOD 433-66, 31 Dec 65. "1. Situation: (S) Two C-47 aircraft (1624 and 49680) are programmed to arrive at Tan Son Nhut o/a 6 Jan 66 and will begin conducting classified missions o/a 11 Jan 66 for an indefinite period...."

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ORGANIZATION

Unit organization manning is based on an approved flying hour program of 150 hours per aircraft per month and a crew ratio of 2.0 per aircraft.<sup>3</sup>

The squadron is organized into three major segments:

Unit Administration  
Operations  
Maintenance

3. PACAF Programmed Action Directive 66-15 (Revised), 1 Nov 66.

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CHAPTER III

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OPERATION AND TRAINING

The 360th Reconnaissance Squadron was combat ready during the reporting period and performing its assigned mission.

SYSTEM INVENTORY

The number of tactical aircraft authorized assigned and available are as follows:

	<u>Authorized</u>	<u>Assigned</u>	<u>31 Dec 66</u>	<u>Available</u>	<u>31 Dec</u>
		<u>30 Sep 66</u>		<u>30 Sep</u>	
Phyllis Ann (RC-47)	17	9	11	9	11
Drill Press (JC-47)	2	2	2	2	2
Total	19	11	13	11	13

CREW RESOURCES AND CAPABILITY

The table below depicts the combat crew status of the organization.

	<u>Crews Authorized</u>	<u>Crews Formed</u>	<u>Combat Ready Crews</u>
30 Sep 1966	36	17	13
31 Dec 1966	36	28	20

Newly arrived aircrews had received Phase I aircraft proficiency training at England Air Force Base, Louisiana, and are considered first pilot qualified. Phase II or in-theater combat readiness training was and will be accomplished on regularly fragged combat missions since training time was and will not be available. Phase II training does not distinguish between pilots and copilots. Most pilots are checked out as aircraft commanders. However, for scheduling and operational accounting purposes, crews are formed in the following manner:

Aircraft Commander  
Pilot  
Navigator  
Flight Mechanic

Crews thus formed are generally scheduled as a unit.

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The table below summarizes the combat mission accomplishments of the DRILL PRESS activities during the period.

"DRILL PRESS" COMBAT MISSIONS

	<u>TOTAL</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
Frag Ordered	112	48	37	27
Total Flown	109	47	36	26
Air Aborted	0	0	0	0
Ground Aborted	0	0	0	0
Cancelled	3	1	1	1

PHYLLIS ANN Activities

The build up of aircrew personnel and the arrival of two additional RC-47 aircraft during the period represented an immediate increase in the 360th's operational capability. This increased capability was translated into the laying-on and acceptance of additional mission requirements. The following data summarizes the results generated by this increased capability during the reporting period.

	<u>TOTAL</u>	<u>October</u>	<u>November</u>	<u>December</u>
Avg No. Acft Possessed		10.4	11.1	10.9
Total Hours Flown	5383	1829.0	1775.0	1779.0
Avg Flying Hrs Per Acft		175.9	159.9	163.2
Total Sorties Flown <sup>6</sup>	989	330.0	332.0	337.0
Avg Sorties Per Acft		32.4	29.0	30.9

The total number of combat missions flown during this reporting period was more than twice that flown during the previous period - 758 missions flown compared to 336 of the previous period. The squadron achieved a 97% successful mission completion rate against total missions fragged or a 99% completion rate if cancelled missions were excluded from originally fragged missions.

6. Ibid

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Mission Activities

6

DRILL PRESS Activities

DRILL PRESS or airborne listening post reconnaissance operations were staged from Hue Phu Bai Air Base, Republic of Vietnam, where aircrews and maintenance personnel are rotated on a temporary duty basis for periods of one to two weeks or longer. All DRILL PRESS missions were flown in the vicinity of the Demilitarized Zone (DMZ).

DRILL PRESS flying hours and number of sorties flown during the reporting period were as follows:

	<u>Total</u>	<u>October</u>	<u>November</u>	<u>December</u>
Avg No. Acft Possessed		2.0	2.0	1.6
Total Hours Flown	653	192.0	265.0	196.0
Avg Flying Hrs Per Acft		96.0	132.5	122.5
Total Sorties Flown <sup>5</sup>	153	66.0	48.0	39.0
Avg Sorties Per Acft		33.0	24.0	24.4

5. Total sorties flown include combat functional check flight, operational check and ferry sorties.

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The combat mission activities of the 360th Reconnaissance Squadron are summarized below.

"PHYLLIS ANN" COMBAT MISSIONS

	<u>TOTAL</u>	<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>
Fragged Missions	781	265	254	262
Completed	758	259	243	256
Air Aborted	5	0	3	2
Ground Aborted	3	3	0	0
Cancelled	15	3	8	4

During this reporting period, the squadron also conducted ARDF missions from Danang Air Base, Republic of Vietnam. Aircrews and aircraft staged from Danang for periods of three to four days on a rotational basis. Most of these missions were flown into Laos. The squadron flew 57 missions during October, 40 missions during November and 2 missions during December into Laos.

Since missions were flown in all four Army Corps areas of South Vietnam, all major ground operations were supported by this unit.

PHYLLIS ANN involves use of the phase angle measurement principle to determine exact location of enemy operated high frequency (HF) transmitters. Immediate information are passed from the aircraft to Commanders in the field when appropriate.

Specific, definitive measures of mission results and therefore of mission accomplishments are not normally available because of the highly sensitive nature of the information. However, correspondence such as those from the Commander, 460th Tactical Reconnaissance Wing dated 17 October 1966<sup>7</sup> and 28 November 1966<sup>8</sup>, reflect the outstanding results that have been achieved by the 360th Reconnaissance Squadron in the performance of its mission.

7. Ltr (S), Comdr, 460 TRW to Comdr, 36ORS, Subj: (U) Phyllis Ann Success, 17 Oct 66, in 360 Ops.

8. Ltr (S), Comdr, 460 TRW to Comdr, 36ORS, Subj: Phyllis Ann Accomplishment (U), 28 Nov 66 in 360 Ops.

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Thus, ARDF results have provided vital information to top level planning staffs as well as information for immediate countermeasures against a possible Viet Cong ambush of a U.S. Army Convoy in a specific instance.<sup>9</sup>

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9. Ibid

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Training

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Concurrent with missing accomplishments, combat crew operational training remained a very significant and important activity of the 360th Reconnaissance Squadron during the reporting period. Aside from upgrading its own newly arrived aircrews to combat ready status, the squadron also provided Phase II operational mission training to aircrews to be assigned to the 361st Reconnaissance Squadron at Nha Trang Air Base, RVN, and to Detachment 1, 361 Reconnaissance Squadron at Pleiku Air Base, RVN.

The tabulation below summarizes the number of combat ready pilots and navigators reassigned to the above-mentioned two organizations during the reporting period.

TO 361st Reconnaissance Squadron, Nha Trang

	<u>October</u> <sup>10</sup>	<u>November</u> <sup>11</sup>	<u>December</u> <sup>12</sup>	<u>Total</u>
Pilots	8	14	4	26
Navigators	4	7	2	13

TO Det. 1, 361st Reconnaissance Squadron, Pleiku

	<u>December</u> <sup>13</sup>
Pilots	23
Navigators	12

- 10. Hq 377CSGp SO AB-602, 15 Oct 66
- Hq 377CSGp SO AB-605, 15 Oct 66
- Hq 377CSGp SO AB-606, 17 Oct 66
- 11. Hq 377CSGp SO AB-653, 5 Nov 66
- Hq 377CSGp SO AB-679, 17 Nov 66
- 12. Hq 377CSGp SO AB-778, 15 Dec 66
- 13. Hq 377CSGp SO AB-720, 2 Dec 66
- Hq 377CSGp SO AB-764, 13 Dec 66
- Hq 377CSGp SO AB-778, 15 Dec 66
- Hq 377CSGp SO AB-878, 28 Dec 66

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The concepts, tactics and training methods used in the performance of the squadron PHYLIS ANN mission have become fairly firm. The Training Section is in the process of preparing a Phase II Training Manual. It will contain the lesson outline, individual lecture material and will be illustrated where necessary. Much of the material that will be presented in this manual was prepared in draft form during the month of October and is now in use as a training aid for the ground school portion of Phase II training.

### Standardization

Having established a positive and disciplined program, the squadron was quite active with standardization and evaluation activities during the reporting period. The standardization and evaluation flight consisted of four pilots, three navigators and one flight mechanic.

This table summarizes the types and number of flight checks administered during the period.

<u>TYPE FLIGHT CHECK</u>	<u>October</u>	<u>November</u>	<u>December</u>
Instructor Pilot Upgrading	5	6	6
Aircraft Commander	19	21	28
Instructor Navigator Upgrading	3	1	2
Navigator	10	13	28
Flight Mechanic	2	1	1

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CHAPTER IV

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MAINTENANCE

During the period 1 October to 31 December 1966, the squadron aircraft maintenance section completed a total of 57 phase inspections. Seventeen were completed during the month of October, eighteen in November and twenty-two in December.

Two squadron aircraft compiled what was believed to be new C-47 flying time records when aircraft 44-76668 flew a total of 203.7 hours during the month of November and following closely on its heel, aircraft 43-48947 flew a total of 200.6 hours during the month of December.

RC-47, 42-93166 sustained major damages to its empennage when Viet Congs attacked Tan Son Nhut Air Base on 4 December 1966. As a result 166 was out of commission for eighteen days.

Despite heavy scheduling of PHYLLIS ANN aircraft to meet operational commitments the squadron maintained relatively high operational readiness rates of 79.7%, 77.4% and 83.0% respectively for the months of October, November and December. DRILL PRESS aircraft achieved operational readiness rates of 95.6%, 95.8% and 95.2% respectively for the same period.

Unscheduled maintenance hours remained high for PHYLLIS ANN aircraft during the reporting period. The principal categories of unscheduled maintenance were engine discrepancies, propeller malfunctions, C-12 compass problems, CPA-24 doppler and component malfunctions, ARD-18 equipment malfunctions, flight attitude indicator malfunctions, radio discrepancies, and driftmeter removal and replacements.

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	<u>PHYLLIS ANM Maint Hours</u>		<u>DRILL PRESS Maint Hours</u>	
	<u>Scheduled</u>	<u>Unscheduled</u>	<u>Scheduled</u>	<u>Unscheduled</u>
October	1552	1143	764	182
November	3906	1935	8.3	9.7
December	13080	5347	347	453

The squadron's NORBS rate remained relatively high because of shortages of peculiar RC-47 parts and back end doppler and ARD-18 component parts. Although showing an improvement over the previous quarter, the NORBS rates for PHYLLIS ANM aircraft were 7.9%, 11.2% and 6.4% respectively for the months of October, November and December.

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SUMMARY

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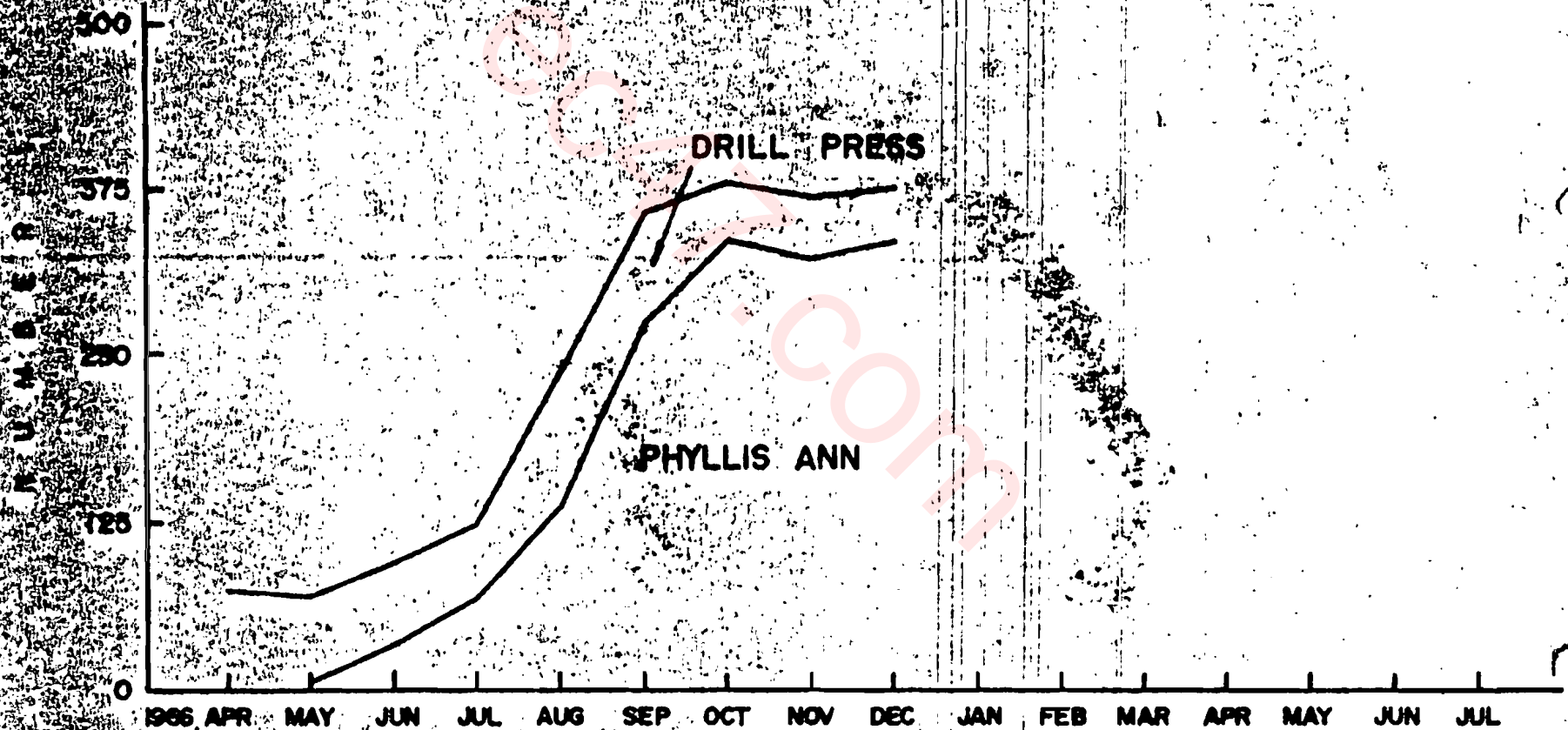
During the period 1 October to 31 December 1966, the 360th Reconnaissance Squadron made much progress in substantially increasing its capability to perform its assigned mission through an effective and efficient program for upgrading newly arrived aircrew personnel to combat ready status. Through the use of ARDF techniques, highly significant data has been gathered which is of great value to the counterinsurgency effort in Vietnam.

Despite supply shortages, the organization's Maintenance section has performed in an outstanding manner in the face of heavy and demanding mission commitments.

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360th RECONNAISSANCE SQ.

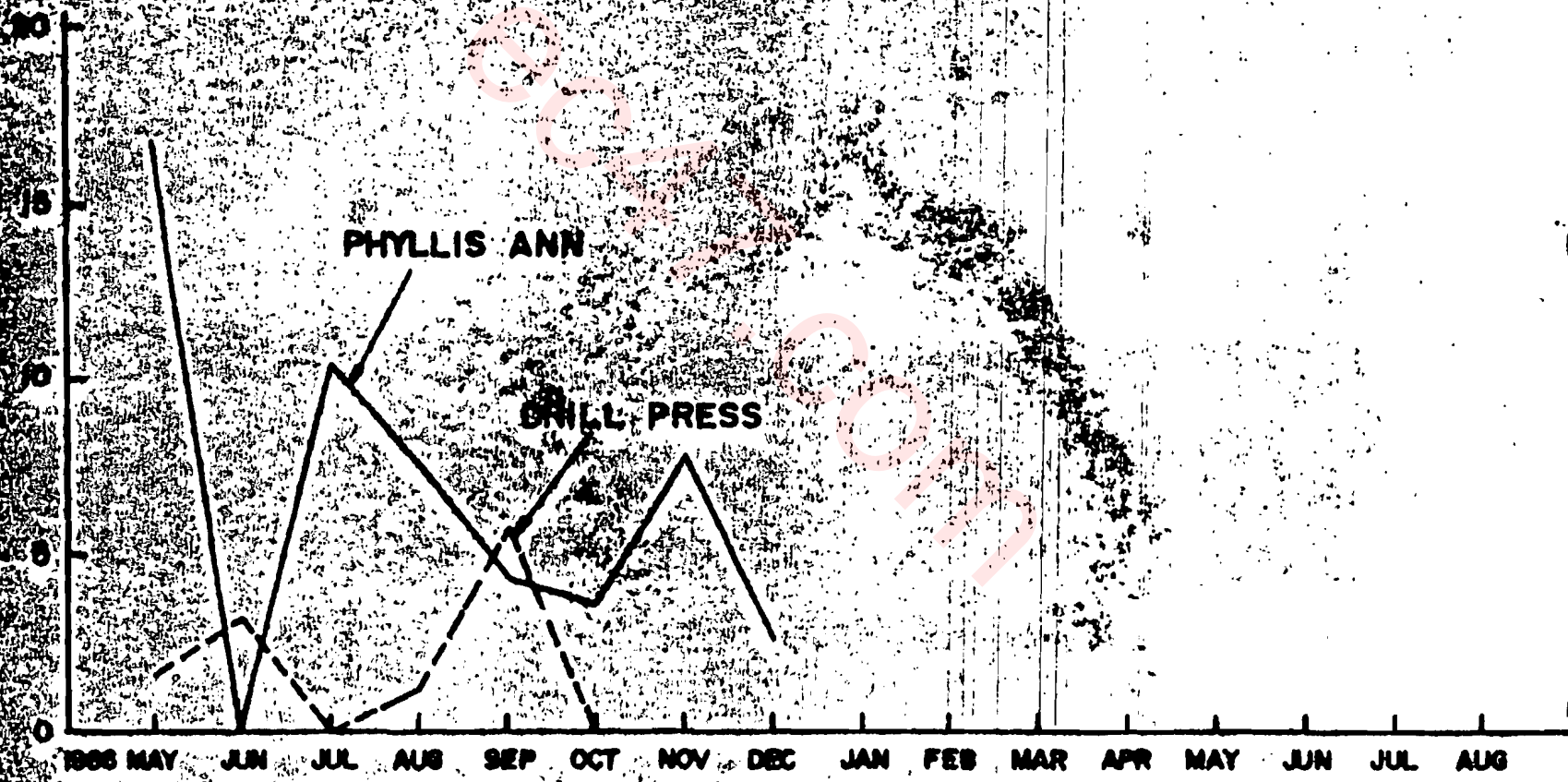
# SORTIES FLOWN



	APR 66	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
PHYLLIS ANN		6	33	68	146	274 <sup>2</sup>	330 <sup>3</sup>	322	337							
DRILL PRESS	74 <sup>1</sup>	64 <sup>1</sup>	62 <sup>1</sup>	55 <sup>1</sup>	86	83	66	48	39							
TOTAL	74	70	95	123	232	357	406	370	376							

<sup>1</sup> INCLUDES ONE "HAWKEYE" ACFT. <sup>2</sup> INCLUDES 49 FERRY SORTIES. <sup>3</sup> INCLUDES 27 FERRY SORTIES

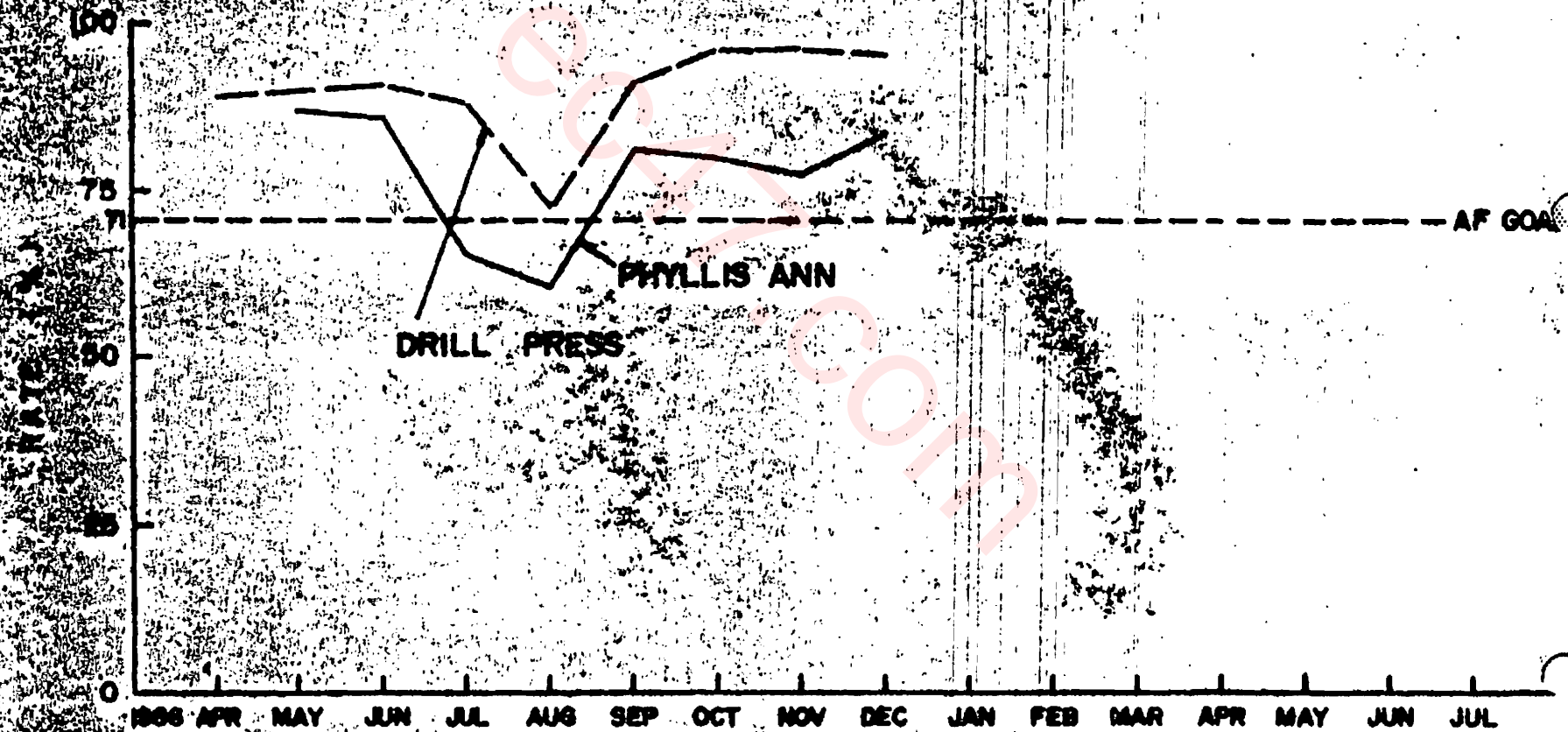
# AIR ABORTS



		MAY 66	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
PHYLLIS ANN	NO	18	0	10	7	8	12	2	0	0	0	0	0	0	0	0	0
	%	18.7	0	10.3	7.5	8.4	12	2.3	0	0	0	0	0	0	0	0	0
DRILL PRESS	NO	12	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	%	1.8	2.2	0	1.2	0	0	0	0	0	0	0	0	0	0	0	0



# OPERATIONAL READINESS RATE



	APR 66	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
PHYLLIS ANN		86.5	85.9	65.1	60.3	60.9	79.7	77.4	83.0							
DRILL PRESS		88.9	89.4	90.6	88.0	72.2	90.8	95.6	95.8	95.2						

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DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 460TH TACTICAL RECONNAISSANCE WING (PACAF)  
APO SAN FRANCISCO 96307



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REPLY TO  
ATTN OF: CCR

17 Oct 66

SUBJECT: (U) Phyllis Ann Success

TO: 360th RS (C)

1. (S)(Gp-4) Attached is a letter which indicates that outstanding results have been achieved by the 360th RS in the performance of their mission. The letter also points out that through use of the ARDF procedures, sole source information has been provided top level planning staffs. Based on the vital information which has been provided, appropriate counter measures have been taken.

2. (C)(Gp-4) Please convey to your men my appreciation for a job well done. They should be advised that their long flight periods and professional management of the flying time has resulted in the gathering of highly significant data which is of great value to the war effort.

EDWARD H. TAYLOR, Colonel, USAF  
Commander

1 Atch  
Ltr, (S) 6994 SS, dtd 10 Oct 66

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36ORS-66-0176

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FROM: 6994th Security Sq (COMDR)

10 Oct 66

SUBJECT: (U) Value of 36ORS Phyllis Ann Efforts

TO: 460th TRW

1. (S)(Gp-3) On 29 September 1966 a Joint J2/NOG briefing was presented to Admiral Sharp and his staff general officers on the enemy threat to Northern First Corp Area SVN with emphasis on the VC/NVA posture in the DMZ. During the briefing General Brown (J2) interrupted to laud the ARDF effort "without which we would be in the dark about the enemy situation."

2. (S)(Gp-3) Feel this reflects credit on the 360th RS because Phyllis Ann has been contributing significantly to ARDF results in the cited area, often obtaining 10 -15 fixes a mission. Presently we are scheduling night missions in DMZ/LAOS/SVN border area at the special request of the III Marine Amphib Force.

ROBERT L WALLANDER, Lt Col, USAF  
Commander

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DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 460TH TACTICAL RECONNAISSANCE WING (PACAF)  
APO SAN FRANCISCO 96307



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REPLY TO  
ATTN OF: CCR

8 Dec 1966

SUBJECT: Phyllis Ann Accomplishment (U)

TO: 360 RS (C)

1. (U) Please extend my personal congratulations to all personnel involved in carrying out the important mission cited in attached correspondence.
2. (S) The fix obtained through ARDF efforts by this crew was the only pre-warning of a carefully planned Viet Cong ambush against an 11th Cavalry, U.S. Army, convoy. This again points out the highly important role being carried out by your squadron in the Southeast Asia conflict.
3. (U) Actions such as this serve as a great source of pride to me and reflect highly favorable on this Wing and the United States Air Force.
4. (U) This letter is classified SECRET because it discusses ARDF operations.

EDWARD H. TAYLOR, Colonel, USAF  
Commander

1 Atch  
Ltr, 7AF  
dtd 28 Nov 66

"THIS IS A TRUE ~~EXTRACT~~ COPY"

360RS-66-0319

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DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS SEVENTH AIR FORCE (PACAF)  
APO SAN FRANCISCO 96307

REPLY TO  
ATTN OF: DIO

28 Nov 66

SUBJECT: Phyllis Ann Accomplishment (U)

TO: Commander, 460th TRW

1. (S) Quoted below are pertinent excerpts from a message sent to the 509th Radio Research Group by the 175th Radio Research Company and forwarded by the 6994th Security Squadron. The fix referred to was the only one involved and was obtained by the 360th Reconnaissance Squadron.

Quote: Subject: TAC REP

Reference: IAPV372 3D SPT PLT 632501 (ARDF SPOT REPORT)

1. Reference msg received 210124Z and fix was passed immediately to Regt S-2.
2. Forward Air Control aircraft was sent into the air approximately 210205Z to recon area.
3. Air strike was requested in the area by FAC.
4. Convoy was notified of possible ambush.
5. Four each UH1D Gun Ships were sent to the area due to approach of the 11th Cav convoy along route one. As convoy reached approximated fix location .... (YT 289 098), recon by fire was begun by helicopters. Fire was returned by VC and subsequent fire fight began. As of 210330Z fire fight continues. No casualty reports received as yet, however, two vehicles were disabled and both VC and friendly KIA's have been reported by S-2. Two each recoilless rifles have been captured.
6. Important point-this ARDF prevented a serious ambush for which the supported command is indebted ..... Unquote.

2. (C) Although clear cut examples such as the above are not a frequent occurrence, they conclusively demonstrate the value of the ARDF efforts. Recommend that this information be brought to the attention of all personnel associated with the Phyllis Ann Program.

3. (U) This letter is classified SECRET because it discusses ARDF operations.

FOR THE COMMANDER

JAMMIE M PHILPOTT, Brig Gen, USAF  
Deputy Chief of Staff/Intelligence

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downgrading and declassification

7DIO-66-2473  
36ORS-66-0319

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