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02-Apr-2009

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3 March 1968

[Redacted]

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(b)(3)

MEMORANDUM FOR: The Honorable Robert S. McNamara
The Secretary of Defense

SUBJECT: US and South Vietnamese Air
Losses in Southeast Asia

As a collateral by-product of CIA's in-house intelligence analysis, my people have drawn together a compilation of data on US and South Vietnamese air losses in Southeast Asia. Naturally we regard this as sensitive information and have given it no dissemination outside the Agency. I believe, however, that you may find it an interesting compendium and am forwarding a copy for your use.

W. F. RABORN

Attachment

Attachment is [Redacted] dated
1 March 1968, "US and South Vietnamese
Air Losses in Southeast Asia"

[Redacted]

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[REDACTED]

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V. F. RABORN

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1 March 1966



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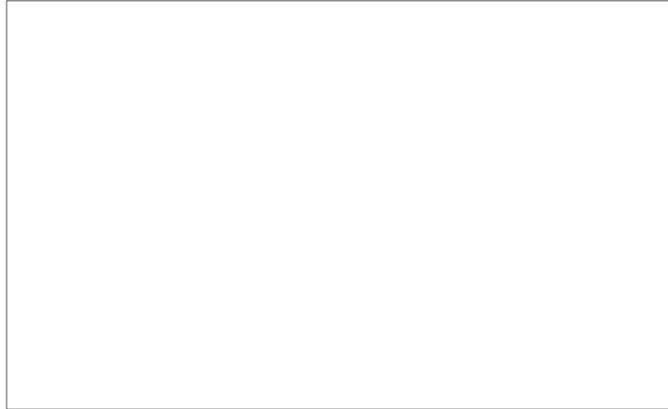
INTELLIGENCE MEMORANDUM

US AND SOUTH VIETNAMESE AIR
LOSSES IN SOUTHEAST ASIA

DIRECTORATE OF INTELLIGENCE
Office of Current Intelligence



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CENTRAL INTELLIGENCE AGENCY
Office of Current Intelligence
1 March 1966

INTELLIGENCE MEMORANDUM

US and South Vietnamese Air Losses in Southeast AsiaSummary

1. The role of airpower in Southeast Asian military operations has steadily increased since 1964. To date more than 800,000 sorties have been flown over North and South Vietnam, and Laos. As a whole, losses have been light. Since 1964 the US has lost 326 manned aircraft in Southeast Asia--201 over North Vietnam, 101 over South Vietnam, and 24 over Laos. The ratio of losses to total sorties is less than one per 2,000. In North Vietnam, however, the loss rate is one per 275 sorties. During this period the South Vietnamese Air force lost 32 fighter aircraft, mostly in South Vietnam. Forty-four US drone reconnaissance aircraft have been lost.

Losses Over North Vietnam

2. The majority of the aircraft lost over North Vietnam--140--were downed by ground fire. Although over 200 surface-to-air missiles have been fired, only 13 piloted aircraft and ten drones have been downed by them. North Vietnamese fighters have accounted for three others. The others were lost because of damage or mechanical failure.

3. US air losses were heaviest between August and November 1965 with an average of 25 aircraft per month during that period. The heaviest losses were inflicted on the F-105 Thunderchiefs and the Navy A4 Skyhawks--61 for the former and 39 for the latter. Both of these aircraft are used primarily as attack fighter bombers and fly most of the sorties, which average about 7,500 per month.

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4. Nevertheless the US loss rate is not high. To date about 55,000 sorties have been flown over North Vietnam, for a loss rate of 1 per 275 sorties.

Losses Over South Vietnam and Laos

5. Over South Vietnam the percentage of air losses is even less. Almost 725,000 sorties have been over South Vietnam from January 1965 through January 1966--almost 696,000 by US aircraft and over 25,000 by VNAF planes for an average of 50,000 sorties a month. During this same period the US lost 101 aircraft in South Vietnam and the VNAF lost 23. This is less than 1 per 2,000 of the total sorties flown. Over Laos there were over 23,000 sorties flown during the past year. Twenty-four US aircraft were lost.

Drone Losses

6. Drone reconnaissance aircraft have suffered the highest losses percentagewise. Of the 100 that have been launched--44 have been lost of which 23 were downed by enemy action. The others were lost because of mechanical difficulty or other causes not attributable to Communist action.

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LIST OF ANNEXES

1. US Aircraft Losses Over North Vietnam.
2. Status of US Pilots and Crews Downed Over North Vietnam.
3. Monthly Breakdown of US Air Losses and Sorties over North Vietnam.
4. US Aircraft Losses Over North Vietnam by Type and Cost of Individual Aircraft.
5. Losses to SAMs Over North Vietnam.
Bombers Lost to Hostile Action in the Sino-DRV Theater.
South Vietnamese Air Force Losses Over North Vietnam - VNAF Sorties by Month.
6. North Vietnamese MIG Losses.
7. US Air Losses and Sorties in South Vietnam and Laos.
8. VNAF Air Losses and Sorties in South Vietnam.

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ANNEX IUS Air Losses Over North Vietnam1. US:

<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
5 Aug 64	Quang Khe	A4C A1H	2	Groundfire	POW KIA
7 Feb 65	Dong Hoi	A4E	1	"	KIA
8 Feb 65	Chap Le	A4C	2	"	POW RES
11 Feb 65	Chap Le	F8D	1	"	RES
2 Mar 65	Xom Bang	2 F100 2 F105	4	"	1 POW 3 RES
14 Mar 65	Tiger Island	A1H	1	"	Lost at Sea
22 Mar 65	Vinh Son	F105	1	"	MIA
26 Mar 65	Cap Mui Ron	1 A4E 1 F8D 1 A1H	3	"	RES
29 Mar 65	Bach Long	1 A4E 2 F8D	3	"	1 KIA 2 RES
31 Mar 65	Vinh Son	A1H	1	"	KIA
3 Apr 65	Dong Phuong	A4 F100	2	"	POW KIA
4 Apr 65	Thanh Hoa	F105	3	1.Groundfire 2.MIG	KIA
5 Apr 65	Route 7	F105	1	Groundfire	RES
6 Apr 65	Route 1	A4C	1	"	KIA
8 Apr 65	Tam Da	F4B	1	"	Pilot and Ra- dar op MIA

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
9 Apr 65	Tam Da	A4C	1	Groundfire	RES
17 Apr 65	Route 8	F105	1	Crashed into Hillside	KIA
20 Apr 65	Route 101	A1H	1	Groundfire	KIA
20 Apr 65	Route 1	A4C	1	Premature Bomb Detonation	KIA
5 May 65	Vinh Linh	RF101	1	Unknown	MIA
7 May 65	Thanh Hoa	F105	1	Groundfire	RES
8 May 65	Vinh	F8D RF8A	2	"	KIA RES
9 May 65	Armed Recce	F8D	1	Failed to pull Out of Flak Run	KIA
17 May 65	Lao Border	F105	1	Flameout	RES
23 May 65	Vinh	F105	1	Groundfire	RES
27 May 65	Vinh	F8D	1	"	KIA
31 May 65	Thanh Hoa	F105	1	"	POW
1 June 65	Vinh	RF8A	2	"	RES KIA
2 June 65	Thanh Hoa	2 A4 1 EA1F	3	"	KIA
8 June 65	Armed Recce	F105	1	"	RES
9 June 65	Chap Le	F4C	1	"	RES
10 June 65	Co Dinh	A1H	1	Failed to Pull up From Flak Run	KIA
14 June 65	Ban Xum Lom	F105	1	Groundfire	POW
20 June 65	Son La	F4C	1	"	RES POW

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
21 June 65	Route 8	B57	1	Unknown	MIA
23 June 65	Mu Gia	F105	1	Groundfire	RES
25 June 65	Thanh Hoa	A4C	1	Unknown	MIA
29 June 65	Son La	RF-101	1	Groundfire	KIA
2 July 65	Recce	F105	1	Fuel Starvation	RES
7 July 65	Recce	F105	1	Groundfire	POW
14 July 65	Ham Rong	A6A	1	"	POW
20 July 65	<u>USS Independence</u>	RA5C	1	Crash Landing	KIA
24 July 65	Lang Chi	F4C	1	SAM	KIA
27 July 65	40 Miles West Of Hanoi	F105	6	Groundfire	1 RES 3 POW 2 MIA
28 July 65	Over Water	F4B	1	Engine Failure	RES
2 Aug 65	Thanh Hoa	F105	1	Groundfire	POW
3 Aug 65	Vinh	F105	1	Groundfire	KIA
7 Aug 65	Dong Hoi	A1H	1	Groundfire	KIA
10 Aug 65	Vinh Tuy	F105	1	Engine fail	Rescued
10 Aug 65	S.E. Of Vinh, Over Water	A1H	1	Unknown	KIA
11 Aug 65	Down At Sea	F105	1	Groundfire	Rescued
11 Aug 65	N.W. Thanh Hoa	A4E	1	SAM	2 KIA
12 Aug 65	Near US Carrier <u>Coral Sea</u>	A4E	1	Groundfire	Rescued
13 Aug 65	N.W. Thanh Hoa	F8D	1	"	No Chute Seen, KIA

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
13 Aug 65	At Sea, Off Thanh Hoa	A4C	1	Groundfire	Rescued
13 Aug 65	At Sea, East Of Vinh	F8A	1	"	Rescued
13 Aug 65	West Of Ninh Binh	A4C	1	"	KIA
13 Aug 65	Near Route 6	F101	1	"	Unknown
13 Aug 65	Ditched Near Hon Matt Is	AlH	1	"	Rescued
24 Aug 65	West Of Ninh Binh	F4B	1	SAM	Prob POW
24 Aug 65	North Of Vinh	A4C	1	Groundfire	POW
24 Aug 65	Central DRV	F105	1	"	Rescued
26 Aug 65	North Of 17th Parallel	AlH	1	"	Unknown
28 Aug 65	Son La Area	F105	1	"	Prob POW
28 Aug 65	Son La Area	AlH	1	"	KIA
29 Aug 65	N.W. Of Vinh	F8A	1	"	KIA
29 Aug 65	West Of Phu To	F105	1	"	POW
31 Aug 65	N.W. Hanoi, 85 Miles	F105	1	"	POW
2 Sept 65	West of Hanoi, 75 Miles	F105	1	"	Unknown
4 Sept 65	Tho Trung Hwy Br.	F4C	1	"	KIA
5 Sept 65	S.E. Of Vinh	AlH	1	"	KIA
6 Sept 65	East Of Dong Hoi	F105	1	"	Rescued
6 Sept 65	Over Thailand	F105	1	Gas Leak	Rescued

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
6 Sept 65	S.E. Of Thanh Hoa At Sea	A4E	1	Groundfire	Rescued
7 Sept 65	At Sea Off Cap Mui Ron	F8A	1	Unknown	Unknown
8 Sept 65	N. Of Thanh Hoa	F8A	1	Groundfire	KIA
9 Sept 65	S.E. Of Vinh	A4E	1	"	POW
10 Sept 65	S.E. Of Vinh	A4E	1	"	KIA
10 Sept 65	S.E. Of Vinh	A1E	1	"	Rescued
13 Sept 65	North Of Dong Hoi	A4E	1	"	KIA
16 Sept 65	Vicinity Of Thanh Hoa	F105	1	"	Prob POW
16 Sept 65	Thanh Hoa Area	F105	1	"	Prob POW
17 Sept 65	S.E. Of Na San	F105	1	"	Prob KIA
17 Sept 65	Bach Long Vi Island	A6A	1	"	KIA
20 Sept 65	Cua Nung Bridge	A4	1	"	Rescued
20 Sept 65	Vicinity Hainan Island	F104	1	MIG	POW
20 Sept 65	Off Danang Over Water	F104	1	Collision	Rescued
20 Sept 65	Off Danang Over Water	F104	1	Collision	Rescued
20 Sept 65	Laos Border Area	F105	1	Unknown	KIA
20 Sept 65	Vicinity Ha Tinh	F105	1	Groundfire	Prob POW
24 Sept 65	DMZ Area	F4C	1	Groundfire	Rescued
27 Sept 65	N.E. Of Thanh Hoa	F101	1	Groundfire	KIA

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
28 Sept 65	West Of Vinh	A1H	1	Groundfire	Prob KIA
30 Sept 65	Ninh Binh Br.	F4C	1	"	KIA
30 Sept 65	Ninh Binh Br.	F105	1	SAM	KIA 1 KIA
1 Oct 65	Vicinity Son La	F4C	1	Groundfire	1 POW
5 Oct 65	Isle Cac Ba	F8	1	SAM	Rescued
5 Oct 65	Vu Chua Br.	F105	1	Groundfire	MIA
5 Oct 65	Sino-DRV Border	F105	1	Poss MIG	Unknown
5 Oct 65	Thanh Hoa	F4C	1	Groundfire	MIA
5 Oct 65	Danang	F101	1	Crashed	Rescued
11 Oct 65	Vinh	A4	1	Groundfire	Rescued
13 Oct 65	East Of Dien Bien Phu	F105	1	"	Rescued
14 Oct 65	Crashed Near Carrier	F8D	1	"	Rescued
15 Oct 65	Xom Lom Area	F105	1	"	Rescued
15 Oct 65	Xom Lom Area	F105	1	Unknown	MIA
16 Oct 65	Lost Contact	A5C	1	Unknown	MIA
17 Oct 65	Thai Nguyen	F4B	1	Groundfire	2 KIA
17 Oct 65	Thai Nguyen	F4B	1	"	2 MIA
17 Oct 65	Thai Nguyen	F4B	1	"	2 MIA
18 Oct 65	S. Of Vinh	F4C	1	Unknown	Unknown
19 Oct 65	Thanh Hoa	A4C	1	Unknown	KIA
22 Oct 65	Haiphong Area	F105	1	Groundfire	POW
25 Oct 65	Bach Long Vi	F4	1	"	Rescued

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
27 Oct 65	Near Laos Border	F8E	1	SAM	POW
30 Oct 65	Phu To Area	A4E	1	Groundfire	POW
31 Oct 65	Near Cac Ba Island	F101	1	"	Rescued
1 Nov 65	Ha Tinh Area	A4E	1	"	Rescued
3 Nov 65	Vicinity Of Na San	F105	1	"	KIA
5 Nov 65	Vicinity Of Hai Duong	F105	1	SAM	KIA
6 Nov 65	Vicinity Thanh Hoa	A1E	1	Groundfire	Unknown
6 Nov 65	Thanh Hoa, Rescue	H3	1	Groundfire	1 Rescued 3 KIA
6 Nov 65	Thanh Hoa	A1E	1	"	POW
6 Nov 65	Thanh Hoa, Rescue	H34	1	"	4 Rescued
6 Nov 65	Thanh Hoa	A4E	1	"	Rescued
10 Nov 65	At Sea Near Cap Mui Ron	A1H	1	Mechanical	Rescued
12 Nov 65	Dong Hoi	A1E	1	Groundfire	POW
12 Nov 65	Dong Hoi	H34	1	"	Rescued
12 Nov 65	Over Thailand	F105	1	Refueling	KIA
16 Nov 65	Cac Ba Island	F105	1	SAM	KIA
17 Nov 65	Hai Duong	F8E	1	Groundfire	Rescued
17 Nov 65	Hai Duong	A4E	1	"	MIA
17 Nov 65	Hai Duong	A1H	1	"	KIA
17 Nov 65	Over Water	F8E	1	Unknown	Rescued

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
17 Nov 65	S. Of Thanh Hoa At Sea	F8E	1	Groundfire	Rescued
18 Nov 65	Aboard Carrier	F8E	1	Crash	Rescued
18 Nov 65	S.W. Of Vinh	F105	1	Unknown	Rescued
28 Nov 65	Near Phuong Dinh	F8	1	Groundfire	Rescued
28 Nov 65	Near Phuong Dinh	F8	1	"	POW
28 Nov 65	S. Of Yen Bai	F105	1	"	MIA
30 Nov 65	Landing On Carrier	F8E	1	Tail Hook	KIA
1 Dec 65	Hai Duong Br.	A4C	1	Groundfire	KIA
1 Dec 65	Cao Nung Br.	F105	1	"	KIA
1 Dec 65	Lost At Sea	A1H	1	Oil Leak	Rescued
2 Dec 65	Vicinity Of Vinh Son	F4B	1	Unknown	MIA
2 Dec 65	Cap Mui Ron	A1H	1	Unknown	KIA
2 Dec 65	Lost At Sea	F4B	1	Out Of Gas	Rescued
8 Dec 65	West Of Thanh Hoa	F4B	1	Unknown	Unknown
8 Dec 65	Near Korat, Thailand	F105	1	Flameout	Rescued
15 Dec 65	Uong Bi TPP	F105	1	Groundfire	Rescued
17 Dec 65	On Carrier Deck	A4	1	Crash	KIA
19 Dec 65	Uong Bi	A5C	1	Unknown	2 MIA
19 Dec 65	Crashed Thailand	F4C	1	SAM	2 Rescued
20 Dec 65	Vi Chua Br.	F105	1	Unknown	Rescued
20 Dec 65	Kep	F100	1	Groundfire	2 MIA

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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
20 Dec 65	Kep	F4C	1	Unknown	2 KIA
21 Dec 65	S.E. Of Vinh	F105	1	Groundfire	MIA
22 Dec 65	Haiphong Area	A6	1	SAM	MIA
22 Dec 65	Uong Bi TPP	A4C	1	Groundfire	POW
22 Dec 65	Uong Bi TPP	A4C	1	"	KIA
22 Dec 65	Uong Bi TPP	A5C	1	SAM	POW
23 Dec 65	Haiphong Area	A4	1	Groundfire	Unknown
22 Jan 66	Bach Long Vi	S2D	1	"	Rescued
26 Jan 66	N. Of Dong Hoi	F101	1	"	MIA
31 Jan 66	S.E. Of Vinh	F105	1	"	MIA
31 Jan 66	Dong Hoi Area	A4E	1	"	Rescued
31 Jan 66	Lost At Sea	F4B	1	"	Rescued
1 Feb 66	Dong Khe Area	A4C	1	"	KIA
3 Feb 66	N. Of Vinh	A5C	1	"	2 POW
7 Feb 66	Vinh Area	A4C	1	"	POW
9 Feb 66	S.E. Of Thanh Hoa	A4C	1	SAM	Rescued
10 Feb 66	S. Of Dong Hoi	A1H	1	Groundfire	KIA
18 Feb 66	Thanh Hoa Area	F4B	1	Nav Failure	MIA
18 Feb 66	West Of Hoi Xuan	A6A	1	Dive-in	KIA
18 Feb 66	Near Mugia Pass	F105	1	Groundfire	Rescued
25 Feb 66	Vicinity Of Vinh	RB66	1	Prob SAM	5 Rescued 1 Missing
26 Feb 66	La Trong Hwy	F105	1	Groundfire	Rescued

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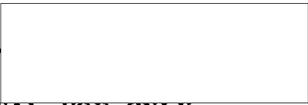
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<u>DATE</u>	<u>LOCATION</u>	<u>TYPE ACFT</u>	<u>NO. OF AIRCRAFT</u>	<u>CAUSE</u>	<u>PILOT/CREW</u>
27 Feb 66	En route To NVN Over Thailand	F105	1	Fire After Refuel	Rescued
1 Mar 66	S. Of Ha Tinh	A4	1	Unknown	Unknown
1 Mar 66	S.E. Of Thai Binh	F4	1	Unknown	Unknown
		<u>TOTAL</u>	201		

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Killed in Action (KIA)	59
Prisoners of War (POW)	30
Missing in Action (MIA)	37
Rescued	87

*These figures are based on initial field reporting only and are subject to error.

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ANNEX 3

US AIR LOSSES OVER NORTH VIETNAM:

BY MONTH

August 64	2
February 65	4
March 65	13
April 65	12
May 65	9
June 65	14
July 65	12
August 65	23
September 65	27
October 65	22
November 65	26
December 65	19
January 66	5
February 66	11
March 66	2

TOTAL	201
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US SORTIES OVER NORTH VIETNAM:

BY MONTH

August 64	Unknown
February 65	198
March 65	768
April 65	2860
May 65	4217
June 65	3841
July 65	6122
August 65	7211
September 65	8218
October 65	8012
November 65	7301
December 65	5743
January 66	2132+
February 66	Unknown

TOTAL	56,623+
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US SORTIES BY FUNCTION:

STRIKE FORCES	7,798
ARMED RECONNAISSANCE	18,062
SUPPORT (includes rescue)	30,763
TOTAL	56,623

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ANNEX 4

US AIRCRAFT LOSSES BY TYPE

PRODUCTION COST OF US AIRCRAFT

A-1 Skyraider	23	282,830
A-4 Skyhawk	39	522,460
A-5 Vigilante	5	8,208,120
A-6 Intruder	4	Unknown
F-4 Phantom	24	2,095,490
F-8 Crusader	25	696,710
F-100 Super Saber	4	Unknown
F-101 Voodoo	7	Unknown
F-104 Starfighter	3	1,691,750
F-105 Thunderchief	61	2,499,310
B-57 Canberra	1	1,508,750
RB-66 Destroyer	1	Unknown
H-3	1	Unknown
H-34 Choctaw	2	Unknown
S-2 Tracker	<u>1</u>	Unknown
TOTAL	201	

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ANNEX 5Losses to SAMs Over North Vietnam

<u>AIRCRAFT</u>		<u>DRONES</u>	
24 July 65	F-4 downed Hanoi area	26 July 65	west of Hanoi
12 Aug 65	A-4 downed S. of Hanoi	19 Sept 65	site #23
24 Aug 65	F-4 downed	18 Oct 65	site #32
30 Sept 65	F-105 site #23	20 Oct 65	near Haiphong
5 Oct 65	F-8 east of Haiphong	5 Nov 65	site #23
27 Oct 65	F-8 west of Hanoi	22 Nov 65	near Phu To
5 Nov 65	F-105 near Than Hoa	20 Dec 65	site #31
16 Nov 65	F-105 near Haiphong	13 Jan 66	site #41
19 Dec 65	F-4 west of Hanoi	7 Feb 66	site #4
21 Dec 65	A-6 site #48	13 Feb 66	near Thanh Hoa
22 Dec 65	RA-5C near Hai Duong	TOTAL.....	10
9 Feb 66	A-4 site #42		
25 Feb 66	RB-66 near Vinh (Probable)		
	TOTAL.....		13

From all evidence available it appears that there have been 210 surface-to-air missiles fired in North Vietnam.

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ANNEX 6Drones Lost to Hostile Action in the Sino-DRV Theater

15 November 64	Shot down over Gulf of Tonkin Chicom MIG
2 January 65	Shot down over North Vietnam by Chicom MIG
13 March 65	Possibly shot down near Hainan Island by Chicom MIG
31 March 65	Shot down near Lingshui by Chicom MIG
3 April 65	Shot down near Nanning by Chicom MIG
18 April 65	Shot down over North Vietnam by Chicom MIG
21 June 65	Lost, possibly shot down by Chicom MIG
26 July 65	Downed by SAM in Hanoi area, Soviet manned
21 August 65	Shot down near Hainan Island by Chicom MIG
19 September 65	Downed by SAM over North Vietnam
18 October 65	Downed by SAM over North Vietnam
20 October 65	Downed by SAM over North Vietnam
5 November 65	Downed by SAM over North Vietnam
22 November 65	Downed by SAM over North Vietnam
20 December 65	Downed by SAM over North Vietnam
24 December 65	Shot down by Chicom MIG near Mengtzu
1 January 66	Shot down near Kep, possibly DRV MIG-21
3 January 66	Possibly damaged by Chicom MIG, failed to return
4 January 66	Downed over DRV, cause uncertain, possible MIG
13 January 66	Downed by SAM over North Vietnam
7 February 66	Shot down by Chicom MIG near Mengtzu
7 February 66	Downed by SAM over North Vietnam
13 February 66	Downed by SAM over North Vietnam

A6-15

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ANNEX 7

SOUTH VIETNAMESE AIR LOSSES OVER NORTH VIETNAM		VNAF SORTIES FLOWN	
February 65	1	February 65	60
March 65	2	March 65	123
April 65	4	April 65	103
September 65	2	May 65	118
TOTAL	<u>9</u>	June 65	108
		July 65	83
		August 65	40
		September 65	21
		October 65	10
		November 65	11
		December 65	43
		January 66	Unknown
		February 66	<u>Unknown</u>
		TOTAL	720+

A7-16

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ANNEX 8North Vietnamese MIG Losses

<u>DATE</u>	<u>TYPE</u>	<u># OF AIRCRAFT</u>	<u>CAUSE</u>
17 June 65	MIG-17	2	US aircraft
20 June 65	MIG-17	1	US aircraft
10 July 65	MIG-17	2	US aircraft
7 February 66	MIG-21	1	Crashed

Three additional MIGs are believed to have been downed by their own groundfire and SAMs.

A8-17

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ANNEX 9US Air Losses In South Vietnam And LaosJanuary 1965 - January 1966

	<u>SOUTH VIETNAM*</u>			<u>LAOS</u>	
	<u>LOSSES</u>	<u>SORTIES</u>		<u>LOSSES</u>	<u>SORTIES</u>
Jan	2	38,073	Jan	2	214
Feb	5	33,624	Feb	1	364
Mar	5	42,503	Mar	0	671
Apr	6	45,546	Apr	4	1737
May	0	46,656	May	2	1245
June	9	49,959	June	2	838
July	7	52,449	July	2	1385
August	3	56,553	Aug	0	1002
Sept	12	41,143	Sept	1	1339
Oct	14	59,173	Oct	1	1396
Nov	15	77,804	Nov	1	1863
Dec	13	77,929	Dec	3	3942
Jan	10	74,234	Jan	5	7151
TOTAL	101	695,646	TOTAL	24	23,147

*Total sorties and losses include helicopter and fixed wing aircraft.

A9-18

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ANNEX 10VNAF Losses In South Vietnam

	<u>LOSSES</u>	<u>SORTIES</u>
Jan 65	2	1,629
Feb 65	3	1,331
Mar 65	3	1,309
Apr 65	5	1,485
May 65	4	1,322
Jun 65	1	1,435
Jul 65	0	2,096
Aug 65	0	2,432
Sep 65	0	2,572
Oct 65	1	2,989
Nov 65	1	2,696
Dec 65	2	2,595
Jan 66	<u>1</u>	<u>1,793</u>
TOTAL	23	25,684

A10-19

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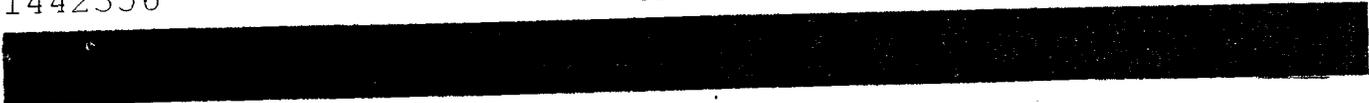


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MEMO NO. : ~~OC No. 0080/66~~

SUBJECT: ~~US and South Vietnamese Air Forces in Southeast Asia~~

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