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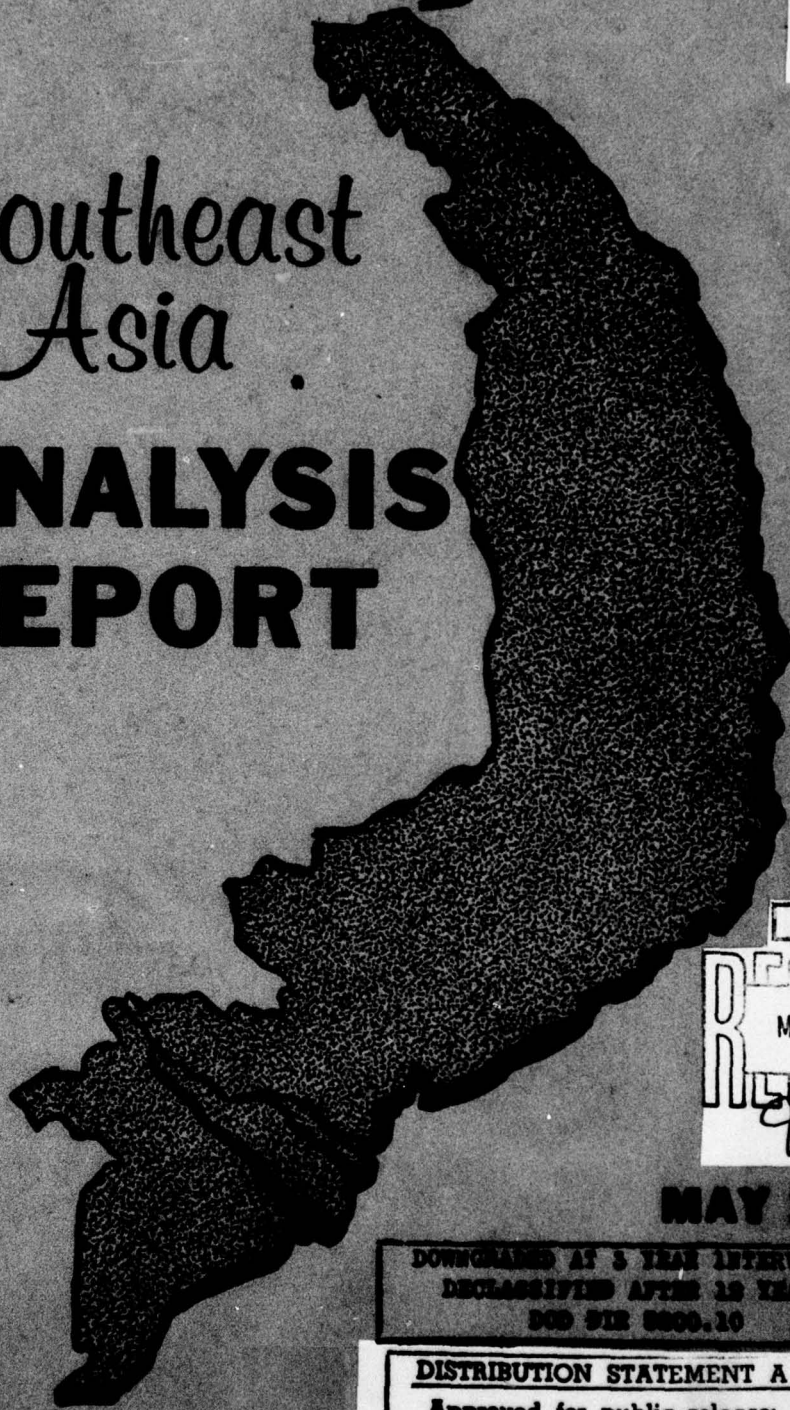
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Southeast Asia

ANALYSIS REPORT



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SOUTHEAST ASIA ANALYSIS REPORT

The Southeast Asia Analysis report is produced monthly by the SEA Programs Division of the Office of the Assistant Secretary of Defense, Systems Analysis. The intent of the report is to update and disseminate, for information and comment, studies of interest to those in OSD and the Services who are responsible for decision-making or analysis related to the conflict in Southeast Asia.

The monthly analysis report is an experimental attempt to improve the quality of analysis on SEA problems and to increase the audience for interesting analytical work. Over time, it will be expanded to include a wider range of topics, synopses of interesting analyses performed by other offices and rebuttals and re-analyses of previously published reports. While it will draw heavily on data from the OSD SEA Statistical Summary, it will not duplicate the content or intent of that document.

In order to improve future reports, any suggestions or comments as to the format, items covered, correctness of data and conclusions drawn, additional dissemination, etc., are encouraged and would be highly appreciated. They should be addressed to the Office of the Assistant Secretary of Defense/Systems Analysis (SEA Prog.Div), The Pentagon Washington, D.C. 20301.

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May 1967

SEA ANALYSIS REPORT

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MAY 1967  
SEA ANALYSIS REPORT HIGHLIGHTS

| <u>ITEM</u>  | <u>PAGE</u> |
|--|-------------|
| Approved forces for SVN rise 4,000 to 483,000. Thailand approved strength increases by 3,100 to 44,400.  | 1           |
| A RAND study indicates that the unpleasant experience of the southern Vietminh cadre with the Diem regime is likely to make the cadre cynical about future promises of amnesty. This could lead them to disobey Hanoi's instructions at the time of a peace settlement, thus jeopardizing Hanoi's control over the VC movement.    | 3           |
| Despite a greater increase in friendly maneuver battalion strength in II Corps, the VC/NVA incident rate there has not reacted with the strong upward trend found in I Corps, nor has the II Corps' shift of incidents from civilian to military targets been as strong.   | 4           |
| Military incidents in IV Corps increased nearly 30% in early 1967, possibly reflecting VC reaction to the first use of U.S. combat troops in that area. Non-military incidents continue at levels well below those experienced from mid-1964 to mid-1966.  | 9           |
| VC incidents in Go Cong Province have decreased by 70% as GVN pacification efforts succeed.  | 11          |
| A study of ground combat operations shows the VC/NVA have considerable control over the numbers of casualties they suffer. This indicates that the military goal of attriting the enemy forces faster than he can replace them may be unattainable.  | 13          |
| Pacification progress in II Corps was greater than in I Corps during CY 1966. As in I Corps, enemy KIA rates in II Corps cannot be predicted on the basis of increases in either friendly strength or friendly activity.   | 16          |
| U.S. Army search and destroy operations in II CTZ have gotten larger but the enemy killed per battalion day in these operations has decreased. Short operations produced between two and three times as many enemy killed per battalion day as long operations.  | 19          |
| The discrepancies in effectiveness of the RVNAF in I, II, and III Corps are much greater than those of the U.S. in the same Corps. The better performance of the RVNAF in I CTZ than in II and III Corps supports the contention that the Marines are doing a better job of supporting and encouraging the RVNAF than is the Army. | 22          |

To J.B.  
Please look at  
the data which  
supports  
their conclusions  
and give  
me your  
input.

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MAY 1967

## SEA ANALYSIS REPORT HIGHLIGHTS

| <u>ITEM</u>  | <u>PAGE</u> |
|--|-------------|
| CY 1967 inflation through April 30 has been 16%. Total CY 1967 inflation can be held to 25%.   | 24          |
| Estimates of the impact of the Vietnam conflict on the U.S. balance of payments are grossly overstated. An end to the war will not end the deficit.  | 32          |
| OSD April "Best Estimate" of fighter and attack aircraft predicts 2333 losses through December 1969, compared to 2770 predicted by the December Plan, a reduction of 437 aircraft. Primary reason is lower attack loss rates in NVN. | 34          |
| Fifty-one aircraft have been destroyed on the ground in SEA by enemy action from July 1965 through March 1967. Thirty-five of the fifty-one lost were helicopters.   | 40          |
| April air ordnance consumption totaled 76,700 tons. Level-off expenditures in SEA still predicted at 81,000 tons.  | 41          |
| Ocean shipments to SEA maintained the same high level as March. Shipments to SVN increased by 10% hitting a new peak; shipments to other SEA areas declined.   | 43          |
| Air shipments to SEA continue to increase. ASD(I&L) has established controls to eliminate unnecessary air shipments.   | 45          |
| AID/Commercial cargo sector of Saigon Port is in best condition in a year. Cargo backlog is equal to only one week's work.   | 46          |
| Construction in support of SEA operations is 54% complete as of March 30, 1967. The cost overrun for construction projects in SVN dropped by \$4 million in March, but still totals \$141 million.                                   | 50          |

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## DEPLOYMENTS TO SOUTHEAST ASIA

Program #4 End Strengths for SVN and Thailand have increased 7100 spaces during the past month. The approved June 30, 1968 strength in South Vietnam rose from 479,100 to 483,100; the approved Thailand strength from 41,300 to 44,400. The following table shows the South Vietnam increase by Service.

### PROGRAM #4 STRENGTH FOR SVN - JUNE 30, 1968

|           | <u>Previously a/<br/>Approved</u> | <u>Currently b/<br/>Approved</u> | <u>Increase</u> |
|-----------|-----------------------------------|----------------------------------|-----------------|
| Army      | 322,100                           | 322,400                          | 300             |
| Navy      | 30,000                            | 30,000                           | -               |
| Marines   | 71,000                            | 74,500                           | 3,500           |
| Air Force | <u>56,000</u>                     | <u>56,200</u>                    | <u>200</u>      |
| Total     | <u>479,100</u>                    | <u>483,100</u>                   | <u>4,000</u>    |

a/ Program #4 through Change 25, 19 April 1967

b/ Program #4 through Change 33, 17 May 1967

The increase in the approved SVN strengths was the result of two decisions:

a. On 12 April 1967, the Secretary of Defense approved an increase of 3500 for the Marine Corps in SVN to offset out-of-country non-effective personnel and keep combat units near full strength.

b. On 8 May 1967, the Secretary of Defense approved additional forces for PRACTICE NINE, of which 478 personnel are authorized for SVN (336 Army and 142 Air Force).

The table below shows the increase in approved strengths for Thailand by Service.

### PROGRAM #4 STRENGTH FOR THAILAND - JUNE 30, 1968

|               | <u>Previously<br/>Approved</u> | <u>Currently<br/>Approved</u> | <u>Increase</u> |
|---------------|--------------------------------|-------------------------------|-----------------|
| Army          | 11,000                         | 11,300                        | 300             |
| USN, USMC, CG | 500                            | 500 a/                        | -               |
| Air Force     | <u>29,800</u>                  | <u>32,600</u>                 | <u>2,800</u>    |
|               | <u>41,300</u>                  | <u>44,400</u>                 | <u>3,100</u>    |

a/ Does not reflect temporary deployment of Navy SP-2 Squadron (331 personnel) from November 1967 to March 1968.

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The Air Force strength increase is associated with the Secretary of Defense 8 May 1967 decision on PRACTICE NINE and includes an EC-121 Wing and an F-4 Squadron. The Army increase includes 39 personnel associated with PRACTICE NINE. Other approved Army increases are an ASA Detachment (77 personnel), a Personnel Services Company (73 personnel), and a Logistic Support Command Headquarters (57 personnel).

The preliminary MACV strength report for April indicates that the plan (Program #4 through Change #33) was exceeded by approximately 13,300 as shown below:

## APRIL 1967 STRENGTH IN SVN

|           | <u>Planned</u> | <u>Actual</u> | <u>Difference</u> |
|-----------|----------------|---------------|-------------------|
| Army      | 273.6          | 285.9         | +12.3             |
| Navy      | 26.1           | 25.9          | - .2              |
| Marines   | 74.0           | 74.1          | + .1              |
| Air Force | 55.4           | 56.5          | + 1.1             |
|           | <u>429.1</u>   | <u>442.4</u>  | <u>+13.3</u>      |

The Army overstrength of 12,300 was the second successive month the Army exceeded Program #4 by a sizeable margin; Army March overstrength was 17,800. MACVs explanation was that there had been a change in reporting procedures for handling transients and patients. There also had been an excess of approximately 8,600 individual replacements over losses.

Strength reports through Army channels, however, show a somewhat different picture. April Army reports show an overstrength of 5,600 (including patients and TDY) as compared to the MACV reported overstrength of 12,300. Since 97.2 per cent of the reported Army strength for SVN is in Army units assigned to USARV, the reasons for such discrepancies are not apparent. The Department of the Army has tasked USARPAC to resolve the differences between the two reports. This matter will also be discussed at the CINCPAC Strength Accounting Conference to be held 22-25 May 1967.

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## ROLE OF THE SOUTHERN VIETMINH CADRE IN SOUTH VIETNAM

RAND recently published\* a study of the Vietminh cadres who remained in the South after the ceasefire of 1954. Based on interviews with 17 prisoners and 6 defectors, the study describes the treatment of these "stay-behinds" by the Diem government, their relationship to the "second resistance", and the implications for our ability to negotiate a peace settlement with Hanoi.

Some of the Vietminh cadres who remained in the South after 1954 actively responded to the discipline and control of the Vietminh leaders in Hanoi. These "actives" organized and propagandized but did not terrorize. However, many other former Vietminh broke their connections with the Vietminh organization. Their sentiments ranged from loyalty to the Vietminh to hostility.

To check the potential threat from former Vietminh, Diem began to identify and control Communist elements in 1955. The former Vietminh saw this program as a campaign of terror, particularly as enforced in the rural areas. Many former Vietminh and their families, whether active or inactive, were harassed and persecuted by local enforcement agents. While the campaign damaged the Communist apparatus and its excesses may not have been intended by the central authorities (they were not evident in Saigon), the Diem regime lost the trust of many potential supporters among the former Vietminh. The surviving active cadres among the "stay-behinds", later reinforced by Vietminh returning from North Vietnam, were able to recruit those previously inactive in a new revolutionary and intelligence network. Their experience in the war against the French enabled them to make, to maintain and expand base areas for training, later serving as military jumping off points.

The experience of the "stay-behinds" from 1954-60 will probably affect both VC and NVN views on a settlement of the war. They are likely to be cynical about future promises of amnesty. Hanoi also may fear that the VC might disobey Hanoi's instructions because of the Diem experience. Thus, Hanoi may see a peace treaty as a threat to its control over the Viet Cong movement in the South.

\* RM-5163-ISA/ARPA, March 1967: "Origins of the Insurgency in South Vietnam, 1954-1960: The role of the South Vietminh Cadres."

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## VC/NVA INCIDENTS IN II CORPS

Despite a greater increase in friendly maneuver battalions in II Corps, the VC/NVA incident rate there has not reacted with the strong upward trend found in I Corps, nor has the II Corps' shift of incidents from civilian to military targets been as strong. However, the pattern of II Corps and I Corps incidents against hamlets and lines of communications are very similar.

In I CTZ Table 1 and graph A show that incidents have steadily increased since the entry of U.S. troops to five times their previous rate (from 436/mo to 2180/mo). II CTZ incident rates, however, doubled after the entry of U.S. troops, dropped back to previous rates and then doubled again in January-February of this year (graph B).

Graph C shows military incidents compared with growth in friendly battalion strength in II Corps. When U.S. forces entered II Corps, 28% of all II Corps incidents were directed at military targets; this rose to 47% by January-February 1967. In I Corps, military incidents rose from 25% to 83% of the total. In II Corps, the shift to military incidents has been slower than the friendly force buildup. II Corps maneuver battalion strength increased 2.2 times between the entry of U.S. forces and first quarter 1967; the proportion of military incidents increased only 1.7 times. In I Corps, maneuver battalions increased 1.8 times; the proportion of military incidents increased 3.3 times.

TABLE 1  
(Monthly Average by Quarter)

|                            | 1965    |                   |                   |         | 1966    |         |         |         | 1967    |
|----------------------------|---------|-------------------|-------------------|---------|---------|---------|---------|---------|---------|
|                            | 1st Qtr | 2nd Qtr           | 3rd Qtr           | 4th Qtr | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Jan Feb |
| <b><u>I CORPS</u></b>      |         |                   |                   |         |         |         |         |         |         |
| Military Incidents         | 126     | 108               | 168               | 362     | 800     | 1143    | 1114    | 817     | 1813    |
| Other Incidents            | 321     | 328               | 247               | 441     | 282     | 175     | 264     | 243     | 366     |
| Total                      | 447     | 436 <sup>a/</sup> | 415               | 803     | 1082    | 1318    | 1378    | 1060    | 2179    |
| Mil as % of Total          | 28      | 25                | 40                | 45      | 74      | 87      | 81      | 77      | 83      |
| Maneuver Bns <sup>b/</sup> |         | 29.8              | 35.3              | 35.3    | 41.0    | 45.1    | 52.8    | 52.8    | 54.0    |
| <b><u>II CORPS</u></b>     |         |                   |                   |         |         |         |         |         |         |
| Military Incidents         | 79      | 84                | 121               | 152     | 324     | 168     | 154     | 141     | 368     |
| Other Incidents            | 295     | 342               | 308               | 360     | 510     | 333     | 258     | 215     | 419     |
| Total                      | 374     | 426               | 429 <sup>c/</sup> | 512     | 834     | 501     | 412     | 356     | 787     |
| Mil as % of Total          | 21      | 20                | 28                | 30      | 39      | 34      | 37      | 40      | 47      |
| Maneuver Bns <sup>b/</sup> |         |                   | 25.8              | 36.8    | 41.0    | 44.0    | 49.3    | 57.7    | 57.7    |

Source: NMCC VCJSA File

<sup>a/</sup> Introduction of III MAF 8 March.

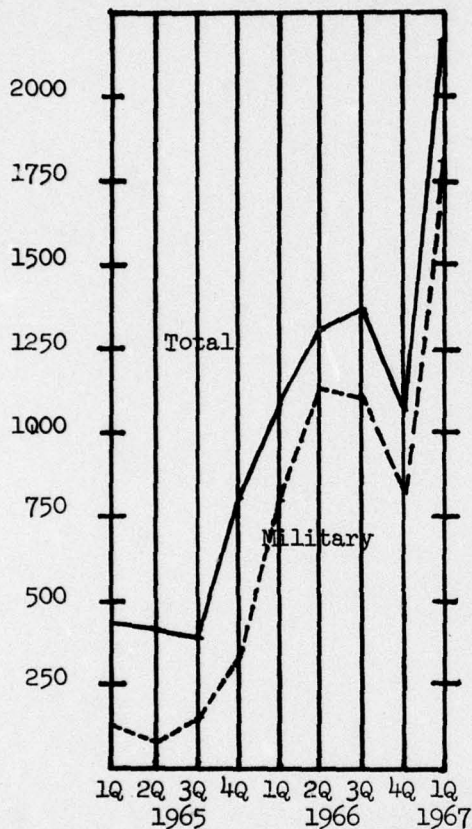
<sup>b/</sup> Weighted: U.S. Army = 1, USMC = 1.5, ARVN = 0.59, ROK = 1, ROK MC = 1.5.

<sup>c/</sup> Introduction of U.S. Army in July.

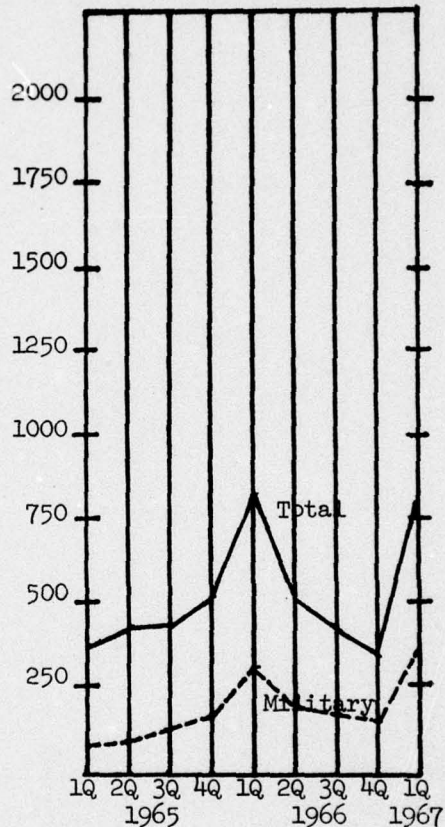
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## VC/NVA INCIDENTS (Monthly Average)

GRAPH A  
I CORPS



GRAPH B  
II CORPS



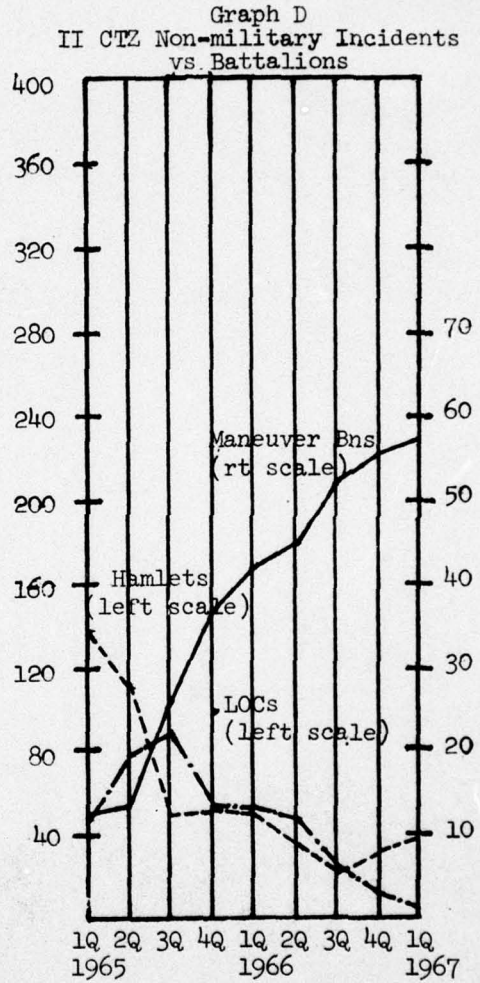
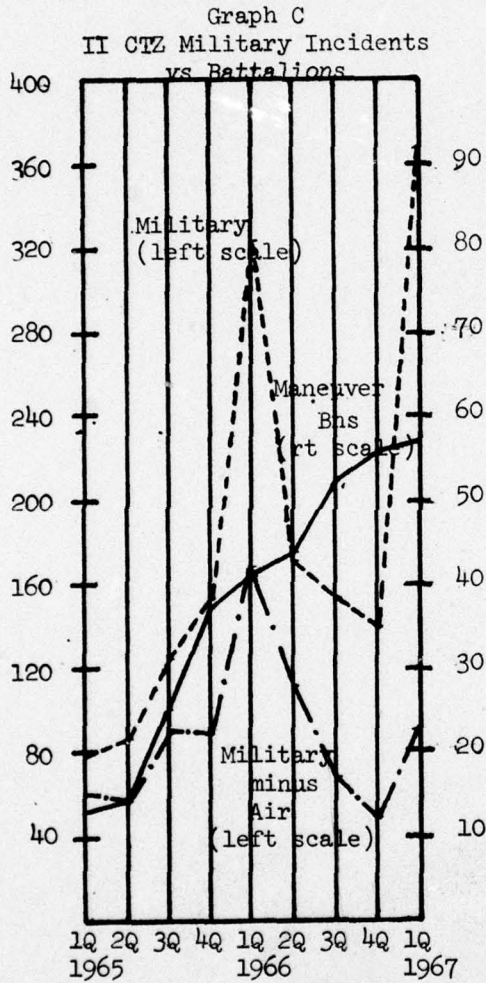
Incidents involving fixed and rotary wing aircraft in II Corps (Table 2) have fluctuated with the peaks and declines of the overall incident rate, with a sharp increase in January-February 1967. In contrast, I Corps incidents increased and remained at high levels throughout 1966, reaching an extremely high rate (2240 per month) in January-February 1967. Reported incidents involving helicopters alone (excluding fixed wing) also fluctuated at low levels in II Corps instead of growing to the sustained high rates in I Corps. Helicopter incidents in II Corps peaked at 11% (173) of the total in January-February 1967 in contrast to the I Corps rate of about 27% throughout 1966.

Incidents against military units and personnel peaked in 1st quarter 1966 at 165 per month or 21% of the total. Before 4th quarter 1965 virtually no incidents against company size or larger military units were reported. In 4th quarter 1965, 23 such incidents occurred per month and in 1st quarter 1966

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they peaked at 88 per month and then declined to 36 per month in January-February 1967. In I Corps incidents against company sized and larger units started at a rate of 27 per month, rose to 575 per month (3rd quarter 1966) and declined to 480 per month in January-February 1967.



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Graph D shows two groups of non-military incidents (against hamlets and against lines of communication) compared with the growth in battalion strength. II Corps activity against LOCs (roads, railroads, bridges, etc.) appears inversely related to the buildup and follows a pattern very similar to I Corps. LOC incidents peaked at 20% of all incidents (87 out of 428) in the same quarter the U.S. buildup began (3rd quarter 1965). By 1st quarter 1967 these incidents had dropped to less than 1% of all incidents (7 out of 787). The decrease is probably due to the fact that most of Highway 1 in II Corps and the railroad along the coast now lie within the Korean and U.S. coastal Tactical Areas of Operation.

Exactly as in I Corps, the number of incidents against hamlets reached a sustained high level in 1964, declined in 1965 by more than 50% and by the beginning of 1966 had returned to 1963 levels.

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TABLE 2

II CORPS INCIDENTS  
(Monthly Average by Quarter)

|                             | <u>1963</u> |     |     |     | <u>1964</u> |     |     |     | <u>1965</u> |     |     |     |
|-----------------------------|-------------|-----|-----|-----|-------------|-----|-----|-----|-------------|-----|-----|-----|
|                             | 1Q          | 2Q  | 3Q  | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  |
| <b>INCIDENTS INVOLVING:</b> |             |     |     |     |             |     |     |     |             |     |     |     |
| <u>Military</u>             |             |     |     |     |             |     |     |     |             |     |     |     |
| Aircraft <sup>a/</sup>      | 15          | 16  | 2   | 11  | 14          | 25  | 14  | 12  | 19          | 27  | 35  | 60  |
| Other <sup>b/</sup>         | 50          | 45  | 60  | 174 | 179         | 109 | 115 | 66  | 60          | 57  | 86  | 81  |
| Subtotal                    | 65          | 61  | 62  | 185 | 193         | 134 | 129 | 78  | 79          | 84  | 121 | 150 |
| <u>Non-Military</u>         |             |     |     |     |             |     |     |     |             |     |     |     |
| Hamlets <sup>c/</sup>       | 22          | 24  | 43  | 222 | 168         | 166 | 224 | 132 | 137         | 110 | 46  | 47  |
| LOCs <sup>d/</sup>          | 4           | 5   | 6   | 20  | 35          | 17  | 57  | 68  | 48          | 75  | 87  | 50  |
| Other                       | 37          | 37  | 36  | 50  | 63          | 179 | 213 | 144 | 111         | 157 | 174 | 261 |
| Subtotal                    | 63          | 66  | 85  | 292 | 266         | 362 | 494 | 344 | 296         | 342 | 307 | 361 |
| TOTAL                       | 128         | 127 | 147 | 477 | 459         | 496 | 623 | 422 | 375         | 426 | 428 | 511 |
| % Military of Total         | 51          | 48  | 42  | 39  | 42          | 27  | 21  | 18  | 21          | 20  | 28  | 30  |

Source: NMCC VQJSA File

a/ Includes helicopters.

b/ Includes outposts, facilities, camps, bivouac, units, personnel, company or larger and less than company.

c/ Includes NRL Hamlet, security fences, hamlets.

d/ Includes roads, all bridges, RR tracks and facilities, communication lines.

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| 4Q  | 1964 |     |     |     | 1965 |     |     |     | 1966 |     |     |     | 1967 |     |
|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|
|     | 1Q   | 2Q  | 3Q  | 4Q  | 1Q   | 2Q  | 3Q  | 4Q  | 1Q   | 2Q  | 3Q  | 4Q  | Jan  | Feb |
| 11  | 14   | 25  | 14  | 12  | 19   | 27  | 35  | 68  | 159  | 57  | 87  | 91  | 278  |     |
| 174 | 179  | 109 | 115 | 66  | 60   | 57  | 86  | 84  | 165  | 111 | 67  | 50  | 90   |     |
| 185 | 193  | 134 | 129 | 78  | 79   | 84  | 121 | 152 | 324  | 168 | 154 | 141 | 368  |     |
| 222 | 168  | 166 | 224 | 132 | 137  | 110 | 46  | 47  | 46   | 36  | 25  | 35  | 38   |     |
| 20  | 35   | 17  | 57  | 68  | 48   | 75  | 87  | 50  | 49   | 45  | 27  | 14  | 7    |     |
| 50  | 63   | 179 | 213 | 144 | 111  | 157 | 174 | 264 | 415  | 252 | 206 | 167 | 374  |     |
| 292 | 266  | 362 | 494 | 344 | 296  | 342 | 307 | 361 | 510  | 333 | 258 | 216 | 419  |     |
| 477 | 459  | 496 | 623 | 422 | 375  | 426 | 428 | 513 | 834  | 501 | 412 | 357 | 787  |     |
| 39  | 42   | 27  | 21  | 18  | 21   | 20  | 28  | 30  | 39   | 34  | 37  | 40  | 47   |     |

divouac, units, personnel,  
amlets.  
and facilities, communication lines.

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## ENEMY INCIDENTS IN IV CORPS

The introduction of U.S. combat forces into IV Corps early this year may have sparked a sharp reaction by the Viet Cong. January and February 1967 incident rates in IV CTZ were up nearly 30% over the levels of a year earlier and the last quarter of CY 1966. Total military and civilian incidents per month almost matched the peak level of the final quarter of 1965 (866 vs 886). The high rate in early 1967 is due to a new peak in military incidents (740 vs 651); non-military incidents were below the levels of the past two years. Aircraft incidents account for most of the increase; the 272 incidents were 101 over the Oct-Dec 1966 level and 193 over the level of a year ago.

This increase in aircraft incidents continues the generally upward pattern of the past 4 years. The pattern has been one of sharp increases to new levels: a jump from 17 to 50 (194% increase) in the 2nd quarter of 1964; an increase from 52 to 103 (98% increase) in the 4th quarter of 1965; and a jump from 103 to 171 (66% increase) in the 4th quarter of 1966. A further increase of 59% took place during the first two months of this year. These increases reflect the increases in tactical air and helicopter sorties that have occurred during this period. For example, helicopter flying hours in IV CTZ increased from 11,800 in the 4th quarter of 1965 to 16,700 during the 2nd quarter of 1966 and about 21,000 per quarter during the last half of 1966. Other factors may be changes in VC tactics and availability of new weapons and ammunition.

Among non-military targets in IV corps the overall trend is downward: 126 per month in the 1st two months of this year compared to 200 per month during CY 1965. Hamlets and villages were primary objects from April 1963 through June 1964. Beginning in July 1964, the emphasis shifted to sabotage (against roads, bridges, and railroad facilities), which suddenly and sharply increased (a 261% increase over the previous quarter's sabotage level) as incidents against hamlets and villages took a downward turn (from 52% to 32% of non-military incidents).

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## INCIDENTS IN IV CTZ

(Monthly Average by Quarter)

|                                   | <u>1963</u> |     |     |     | <u>1964</u> |     |     |     |     |     |  |
|-----------------------------------|-------------|-----|-----|-----|-------------|-----|-----|-----|-----|-----|--|
|                                   | 1Q          | 2Q  | 3Q  | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  | 1Q  | 2Q  |  |
| <u>Incidents Involving:</u>       |             |     |     |     |             |     |     |     |     |     |  |
| <b>Military</b>                   |             |     |     |     |             |     |     |     |     |     |  |
| Aircraft <sup>a/</sup>            | 11          | 6   | 12  | 10  | 17          | 50  | 74  | 36  | 37  | 38  |  |
| Outposts <sup>b/</sup>            | 37          | 72  | 136 | 230 | 116         | 170 | 361 | 385 | 397 | 447 |  |
| Personnel & Units                 | 46          | 73  | 73  | 94  | 61          | 51  | 55  | 94  | 93  | 77  |  |
| Subtotal                          | 94          | 151 | 221 | 334 | 194         | 271 | 490 | 515 | 527 | 562 |  |
| <b>Non-Military</b>               |             |     |     |     |             |     |     |     |     |     |  |
| Hamlet & Villages <sup>c/</sup>   | 13          | 81  | 95  | 77  | 49          | 65  | 69  | 32  | 55  | 43  |  |
| Roads, Bridges & RR <sup>d/</sup> | 2           | 4   | 16  | 23  | 21          | 32  | 118 | 97  | 91  | 115 |  |
| Civilians <sup>e/</sup>           | 6           | 15  | 12  | 2   | 3           | 27  | 28  | 25  | 28  | 53  |  |
| Subtotal                          | 21          | 100 | 123 | 102 | 73          | 124 | 215 | 154 | 174 | 211 |  |
| <b>TOTAL</b>                      | 115         | 251 | 344 | 436 | 267         | 395 | 705 | 669 | 701 | 773 |  |
| <b>% Military of Total</b>        | 82          | 60  | 64  | 77  | 73          | 69  | 70  | 77  | 75  | 73  |  |

Source: NMCC VCJSA File

a/ Includes helicopters

b/ Includes watchtowers

c/ Includes hamlets, NRL Hamlets and facilities, security fences.

d/ Includes vehicular and railroad bridges, railroad tracks and facilities

e/ Includes officials and inhabitants.

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| <u>1963</u> |     | <u>1964</u> |     |     |     | <u>1965</u> |     |     |     | <u>1966</u> |     |     |     | <u>1967</u> |
|-------------|-----|-------------|-----|-----|-----|-------------|-----|-----|-----|-------------|-----|-----|-----|-------------|
| 3Q          | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  | 1Q          | 2Q  | 3Q  | 4Q  | Jan-Feb     |
| 12          | 10  | 17          | 50  | 74  | 36  | 37          | 38  | 52  | 103 | 79          | 85  | 103 | 171 | 272         |
| 136         | 230 | 116         | 170 | 361 | 385 | 397         | 447 | 328 | 479 | 385         | 430 | 260 | 275 | 330         |
| 73          | 94  | 61          | 51  | 55  | 94  | 93          | 77  | 60  | 69  | 76          | 118 | 72  | 93  | 138         |
| 221         | 334 | 194         | 271 | 490 | 515 | 527         | 562 | 440 | 651 | 540         | 633 | 435 | 539 | 740         |
| 95          | 77  | 49          | 65  | 69  | 32  | 55          | 43  | 28  | 41  | 24          | 29  | 17  | 21  | 29          |
| 16          | 23  | 21          | 32  | 118 | 97  | 91          | 115 | 104 | 141 | 63          | 140 | 76  | 87  | 62          |
| 12          | 2   | 3           | 27  | 28  | 25  | 28          | 53  | 37  | 53  | 60          | 50  | 27  | 27  | 35          |
| 123         | 102 | 73          | 124 | 215 | 154 | 174         | 211 | 169 | 235 | 147         | 219 | 120 | 135 | 126         |
| 344         | 436 | 267         | 395 | 705 | 669 | 701         | 773 | 609 | 886 | 687         | 852 | 555 | 674 | 866         |
| 64          | 77  | 73          | 69  | 70  | 77  | 75          | 73  | 72  | 73  | 79          | 74  | 78  | 80  | 85          |

ies, security fences.  
railroad tracks and facilities

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## GO CONG PROVINCE - PACIFICATION AND VC ACTIVITY

A number of logical theses on changes in patterns of VC incidents in an area undergoing pacification could be developed. One might be a sharp increase in actions as the VC reacted to GVN efforts to increase their control. An alternative hypothesis would be that pacification progress leads to an over-all drop in incident rates. Data on Go Cong Province in IV Corps, a province making rapid progress, supports this latter thesis. a/

When an area is pacified by the GVN significant changes in incident patterns should occur. The nature of the change probably differs depending on the strength of the VC, the approach taken by the GVN, etc. As a preliminary study of how activity patterns change, Go Cong, a province in northeastern IV Corps, was examined. Go Cong Province was created in January 1964 when it was separated from Dinh Tuong Province. GVN efforts have increased its control in Go Cong from essentially 0% to about 50% and progress is continuing. Therefore, Go Cong appears to be a good test of the changes in VC activity as an area is successfully pacified.

Objects of VC Incidents - Table 1 examines the objective of VC incidents since Go Cong was created in 1964. Total numbers of actions have dropped sharply since Jan 1966, averaging 46 per quarter compared to 170 per quarter in 1964 and 132 in 1965. Incidents against military objects decreased until the final quarter of 1966 when a sharp jump occurred; the 1st quarter 1967 level was even higher. The primary cause of this rise was an increase in incidents against aircraft. This may merely reflect a large increase in aircraft sorties in the area or it may be indicative of changes in VC tactics and equipment. In any event aircraft incidents would appear to have little if any impact on the study. If these are excluded, the military incident level would be stable from early 1966 to the present.

Incidents against civilian targets and transportation/communications targets tended to increase in 1964 and early 1965 and declined steadily since. One target that has been struck more frequently is waterborne craft. This may reflect the greater use of waterways since the province began to be secured or it may reflect greater activity by GVN/US forces (such as GAME WARDEN) which draw VC fire. The data are not adequate to provide any insight as to the reasons for this increase.

a/ A data file recently automated by the JCS National Military Command Center (NMCC) may provide a new tool to evaluate pacification progress. This file, based on a study of VC incidents by WSEG (Staff Study 122, May 1966), permits detailed examination of VC incident patterns by province using two types of measures: 1) 36 categories of actions (e.g., attack, harassing fire, sabotage) and 2) 83 categories of the objective of the action (e.g., military unit, outpost, road). The data are very detailed and can be sorted and viewed in innumerable ways. (NMCC file VCJSA)

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TABLE 1  
VIET CONG INCIDENTS - GO CONG PROVINCE

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|                                      | 1964    |         |         |         | 1965    |         |         |         | 1966    |         |         |         | 1967    |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                      | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | 1st Qtr |
| <u>Military</u>                      |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Watch Tower, Outposts                | 76      | 54      | 106     | 41      | 43      | 30      | 9       | 46      | 13      | 15      | 4       | 5       | 6       |
| Aircraft                             | 1       | 5       | 13      | 6       | 3       | 5       | 1       | 8       | 3       | 4       | 8       | 20      | 16      |
| Police, Military Personnel & Units   | 11      | 12      | 16      | 11      | 26      | 21      | 8       | 11      | 9       | 11      | 1       | 10      | 18      |
| Other                                | -       | -       | 1       | 0       | 4       | 3       | 1       | 2       | -       | -       | -       | -       | -       |
| Sub-total                            | 88      | 71      | 136     | 58      | 76      | 59      | 19      | 67      | 25      | 30      | 13      | 35      | 40      |
| <u>Civil</u>                         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Hamlets & Villages                   | 5       | 2       | 3       | 1       | 23      | 9       | 2       | 6       | -       | -       | -       | 1       | 2       |
| Civil Facilities                     | -       | 2       | 4       | 2       | 4       |         | 4       | -       | 1       | -       | -       | -       | -       |
| Civil Officials                      | -       | 3       | 5       | 5       | 4       | 5       | 1       | 3       | 2       | 2       | 2       | 1       | -       |
| Other                                | 1       | 4       | 5       | 2       | -       | -       | 3       | 2       | 1       | 5       | -       | 2       | 3       |
| Sub-total                            | 6       | 11      | 17      | 10      | 31      | 14      | 10      | 11      | 4       | 7       | 2       | 4       | 5       |
| <u>Transportation/Communications</u> |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Roads & Bridges                      | 32      | 33      | 155     | 33      | 71      | 72      | 42      | 42      | 14      | 9       | -       | 14      | 4       |
| Land Vehicles                        | 1       | 4       | 10      | 5       | 7       | 3       | 0       | 1       | -       | -       | -       | 2       | -       |
| Water Vehicles                       | 2       | 6       | 1       | 1       | 1       | -       | -       | -       | -       | 5       | -       | 4       | 12      |
| Communications                       | -       | -       | -       | -       | -       | 1       | -       | -       | -       | -       | -       | -       | -       |
| Other                                | -       | -       | -       | -       | -       | 1       | -       | -       | -       | -       | -       | -       | -       |
| Sub-total                            | 35      | 43      | 166     | 39      | 79      | 77      | 42      | 43      | 14      | 14      | -       | 20      | 16      |
| Total                                | 129     | 125     | 319     | 107     | 186     | 150     | 71      | 121     | 43      | 51      | 15      | 59      | 61      |

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## THE STRATEGY OF ATTRITION

MACV's briefings and public statements emphasize the goal of attriting enemy forces faster than the enemy can recruit and infiltrate replacements. Is this emphasis practical or wise? Many senior officers have noted that the enemy fades into the jungle and refuses to fight when faced with superior forces. Some make the stronger statement that the enemy only fights at a time and place of his own choosing. If these statements are largely true, and if the enemy's objective in fighting is to harrass and outlast us, he is unlikely to fight so hard as to allow us to deplete his forces.

Because the enemy's degree of control over the pace of the action determines how well he can control his attrition, we have analyzed the degree of the enemy's tactical initiative. We classified 56 platoon-sized and larger fire-fights in 1966 according to how they developed. The data is based on detailed accounts in I, II, and III CTZ, as compiled by S.L.A. Marshall and F.J. West, under Service sponsorship.

TABLE I

### TYPE OF ENGAGEMENTS DESCRIBED IN COMBAT NARRATIVES

| <u>Category Description</u>   | <u>Nr. of Engagements</u> | <u>Percent of Total</u> | <u>Percent Subtotals</u> |
|---|---------------------------|-------------------------|--------------------------|
| 1. Hot Landing Zone. Enemy attacks U.S. troops as they deploy onto the battlefield.   | 7                         | 12.5                    |                          |
| 2. Organized enemy attack against a U.S. static defense perimeter.  | 17                        | 30.4                    |                          |
| 3. VC/NVA ambush or encircle and surprise a moving U.S. unit, using what is evidently a preconceived battle plan.   | 13                        | <u>23.3</u>             | 66.2                     |
| 4. A moving U.S. unit engages the enemy in a dug-in or fortified position:  |                           |                         |                          |
| a. The main engagement comes as a virtual surprise to the American tactical commander because the enemy is well concealed and has been alerted either by observations of our unit or by our engaging apparent stragglers near-by. | 7                         | <u>12.5</u>             | 78.7                     |
| b. The U.S. tactical commander has reasonably accurate knowledge of enemy positions and strength before committing his forces.  | 3                         | <u>5.4</u>              | 84.1                     |
| 5. U.S. unit ambushes a moving enemy unit.  | 5                         | 8.9                     |                          |
| 6. Chance engagement, both sides surprised.   | 4                         | <u>7.1</u>              |                          |
| TOTAL   | <u>56</u>                 | 100.1                   |                          |

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The enemy willingly and knowingly stood and fought a pitched battle in 47 (84%) of the 56 battles (Categories 1-4 in Table I). The enemy ambushed and assaulted our forces in 37 (66%) of the cases; the enemy had the advantage of surprise in 7 other cases (12%) in which U.S. forces were moving against him.

The 10 cases in which a moving US unit engaged a dug-in enemy (Category 4) warrants further discussion. Typically, during the 7 engagements of Category 4a, American units pressed forward into combat after events made them aware of enemy presence. Our company and platoon commanders in these narratives often strived to take immediate advantage of what seemed to be an inviting situation without fully reconnoitering enemy forces and positions. The enemy appeared to be caught in an unaware or straggling condition that viewed in hindsight may have been a lure. Clearly, the enemy chose these occasions to fight. Usually he was badly beaten. In the future he may not be so willing, and we may not be able to kill so many.

The 3 cases in Category 4b were instances when the American commander engaged enemy positions while possessing accurate knowledge of both the enemy force and its position.

Common to 44 of the 56 cases (78.7%) in the first three categories and 4a is the element of enemy surprise with regard to time, position, or strength; the American tactical commander was put at an initial disadvantage by enemy initiative. The entire picture is not consistent with the successful prosecution of a strategy to force attrition upon the enemy against his will.

After Action Reports. COMUSMACV requires that an After-Action Report be written by the responsible commander after every significant operation. These reports constitute the most comprehensive official source of information available on ground operations. Reports covering 77 U.S. operations terminating from January through October 1966 were reviewed (of 186 total) to determine what percentage of VC/NVA losses (KIA-body count plus captured) occurred in combat resulting from enemy initiative or active willingness to engage at the tactical level. Enemy mortar attacks, sniping, and attempts to over-run our perimeters are examples of the overt action which indicated that he sought combat.

The pertinent portions of the reports are the narrative accounts, which vary in quality and detail. There was sufficient information to permit classification of only 38% (3600 of 9458) of the enemy casualties; in the other cases the enemy casualties in the "body count" are unexplained by the narratives, or are covered by narratives too vague to be interpreted in the present context. Table 2 shows that of the classifiable enemy casualties, 62% occurred in actions where the enemy sought the initial contact.

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TABLE 2

## DEPENDENCE OF ENEMY LOSSES ON ENEMY INITIATIVE AT THE TACTICAL LEVEL JANUARY THROUGH OCTOBER 1966

|  |   |                    |
|--|---|--------------------|
| Enemy KIA & Cpt informatively described as to occurrence |   |                    |
| Category I   | - Those enemy Casualties occurring when enemy sought initial contact.                       | 1,982 (62%)        |
| Category II  | - Those enemy Casualties occurring when enemy did not seek initial contact.                 | <u>1,233</u> (38%) |
| Subtotal   | - Category I plus Category II   | 3,215 (100%)       |
| Other  | - Those enemy Casualties resulting from air, arty, mines, etc., and not classifiable above. | <u>385</u>         |
|  |   | <u>3,600</u>       |

### ARCOV Study Results

Independently, the Army Combat Operations - Vietnam study, which analyzed a different set of battles in late 1965 and early 1966, found that 46% of the fights begin as enemy ambushes and that the enemy starts the fight in 88% of the cases; moreover, it found that 63% of the infantry targets encountered were personnel in trenches or bunkers.

### Conclusion:

During 1966 most of the enemy attrition depended upon his willingness to engage. His aggressive and offensive tactics were obvious in ambushes both at landing zones and as our units moved forward on sweeps. He anticipated our tactics, produced substantial U.S. casualties, and decided the losses he was willing to take. While more effective U.S. techniques probably can increase enemy attrition, we must recognize that U.S. ground units do not have the tactical initiative in most encounters at present.

Enemy attrition in 1966 was largely the result of his seeking combat, not the result of combat forced upon him. Continued large-scale enemy attrition remains subject to his willingness to fight. Should the enemy find that his attrition has reached a rate unacceptable to him, he can avoid combat, use more mortar and rocket attacks, resort to smaller, guerrilla-like actions, or rely increasingly upon isolated acts of terrorism. Given such an enemy decision, and without a change in the tactics employed by U.S. forces, a strategy of attrition cannot be prosecuted successfully.

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## FORCE EFFECTIVENESS IN II CORPS

Pacification progress in II Corps was greater than in I Corps during CY 1966. As in I Corps (see April SEA Analysis Report) enemy KIA rates in II Corps cannot be predicted on the basis of increases in either friendly strength or friendly activity.

### Population Control\*

Table 1 shows an increase of 342,000 people in the II Corps secured category in contrast to I Corps' decrease of 8,800.

TABLE 1

### CIVILIAN POPULATION CONTROL IN II CORPS (thousands)

|                     | 1965       |            | 1966       |            |            |            | End 1966-<br>End 1965 |
|---------------------|------------|------------|------------|------------|------------|------------|-----------------------|
|                     | 3rd<br>Qtr | 4th<br>Qtr | 1st<br>Qtr | 2nd<br>Qtr | 3rd<br>Qtr | 4th<br>Qtr |                       |
| Secured             | 937        | 1020       | 1133       | 1079       | 1079       | 1362       | + 342                 |
| Undergoing Securing | 112        | 116        | 72         | 171        | 155        | 136        | + 20                  |
| Undergoing Clearing | 778        | 809        | 800        | 788        | 825        | 789        | - 20                  |
| Uncontested         | 7          | 10         | 9          | 53         | 26         | 32         | + 22                  |
| VC Control          | 779        | 678        | 614        | 582        | 599        | 425        | - 253                 |
| Total               | 2613       | 2633       | 2628       | 2673       | 2684       | 2744       | + 111                 |

In comparing I Corps and II Corps in the VC control category, II Corps again was ahead--a decrease of 253,000 persons under VC control versus 217,000 persons for I Corps. Since II Corps had a slightly faster rate of increase in friendly maneuver battalion strength, the average reduction in the VC controlled population per battalion per month were essentially equal: 11,000 in II Corps versus 10,700 in I Corps.

### Enemy KIA

II Corps data in Table 2 and graph A show no correlation between enemy KIA and increases in friendly battalion strength. Table 2 and graph B also indicate that we cannot predict future enemy KIA rates from previous trends in battalion days of operations and small unit actions with contact.

\* Pacification progress in II Corps cannot be measured in terms of increases in the Tactical Areas of Responsibility (TAOR). An Army TAOR is a base area; the enemy main forces are outside the TAORs. The USMC TAOR is an area in which the Marines operate; they raise security inside gradually expanding TAORs.

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The two peaks in enemy KIA are due to two large operations in each of the two quarters. In 1st quarter 1966 Operations VAN BUREN and MASHER/WHITE WING accounted for 1701 enemy KIA or 131 per week of the 401 weekly average for that quarter. Operations THAYER II and SAM HOUSTON killed 2400 enemy in 1st quarter 1967, or 185 of the 441 weekly average. If the enemy had chosen to fight in those quarters as he fought in the others, his losses would have been 270 and 256 per week, respectively. The average for the seven quarters would have been 300 per week, with a range of only  $\pm$  50 per week.

TABLE 2

|                             | 1965 |      | 1Q   | 1966 |      |                   | 1967<br>1Q |
|-----------------------------|------|------|------|------|------|-------------------|------------|
|                             | 3Q   | 4Q   |      | 2Q   | 3Q   | 4Q                |            |
| Enemy KIA per week          | 290  | 317  | 401  | 335  | 276  | 349               | 441        |
| Battalion Days Operation    | 1466 | 1817 | 2762 | 2887 | 3147 | 4097              | 4987       |
| Small Unit Action w/Contact | 348  | 413  | 201  | 246  | 207  | 211 <sup>b/</sup> | 304        |
| Maneuver Bns <sup>a/</sup>  | 25.8 | 36.8 | 41.0 | 44.0 | 49.3 | 57.7              | 57.7       |

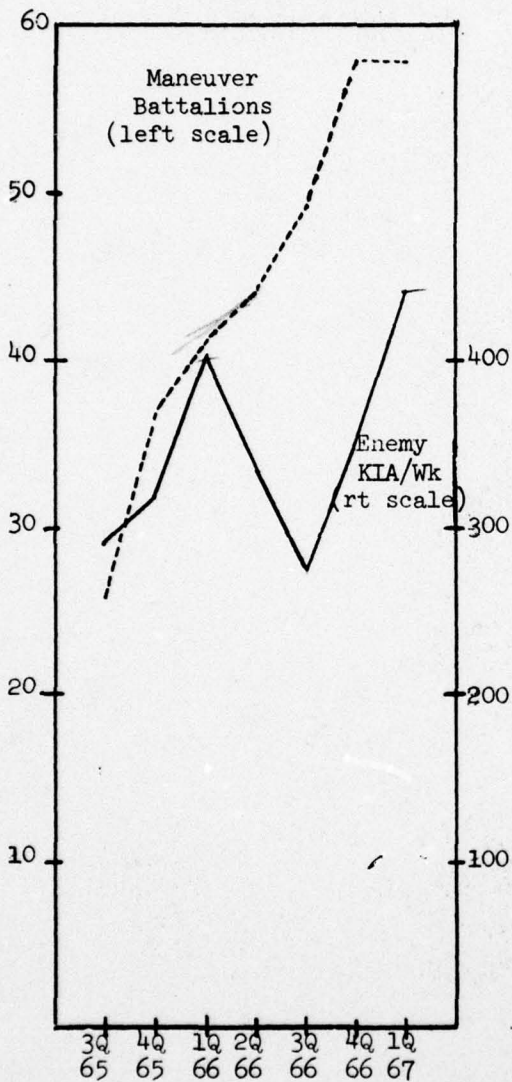
<sup>a/</sup> Weighted: U.S. Army = 1, ARVN = .59, ROK = 1, ROK MC = 1.5.

<sup>b/</sup> U.S. Army did not report Small Unit Actions w/Contact after September 1966.

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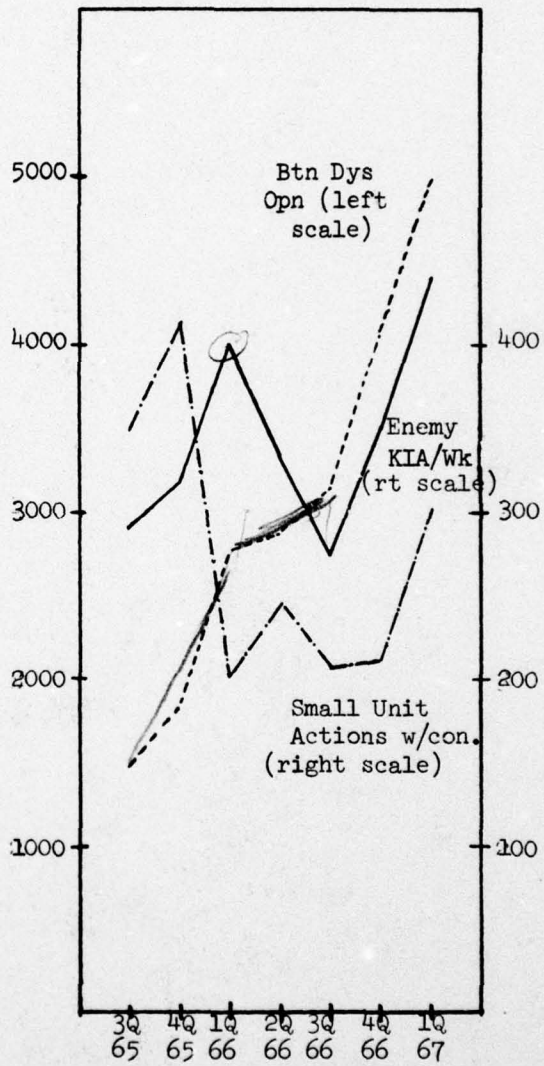
Graph A

Enemy KIA vs Friendly Strength



Graph B

Enemy KIA vs Friendly Activity



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## LARGE U. S. ARMY GROUND OPERATIONS IN II CORPS

The U. S. Army conducted 60 search and destroy operations in II Corps from August 1965 to March 1967, using over 75% of the battalion days of operation (the rest were used for security operations). The search and destroy operations killed (body count) 14,526 VC/NVA in 7,055 battalion days of operation - 2.1 KIA per battalion day. However, while the average number of battalion days per operation and the average number of battalions committed per operation has increased steadily, the enemy killed per battalion has decreased equally as sharply since the 1st quarter of 1966. (See Table 1) The lowest point occurred in the 3rd quarter of 1966, the same quarter in which there was the highest average of battalions committed per operation. (See graphs)

The last two quarters of 1965 seem to represent a period of learning for both the enemy and the U. S. In the subsequent period between January 1, 1966 and April 5, 1967 the U. S. Army started and completed 32 search and destroy operations<sup>a/</sup> in II Corps. Table 2 groups these operations according to size, both in terms of battalions committed and battalion days of operation. Short operations produced between two and three times as many enemy killed per battalion day as long operations.

<sup>a/</sup> This number does not equal the one found on Table 1 because (1) long operations were not divided; (2) two operations included on Table 1 were not completed by April 5th; (3) four small operations totalling 24 battalion days with only one or two committed battalions were eliminated.

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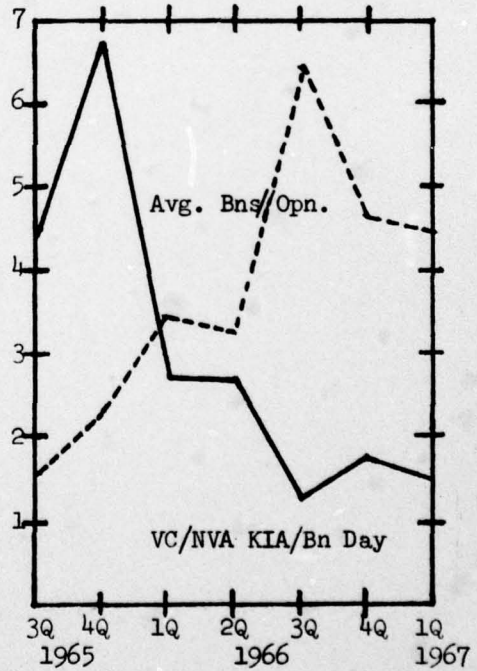
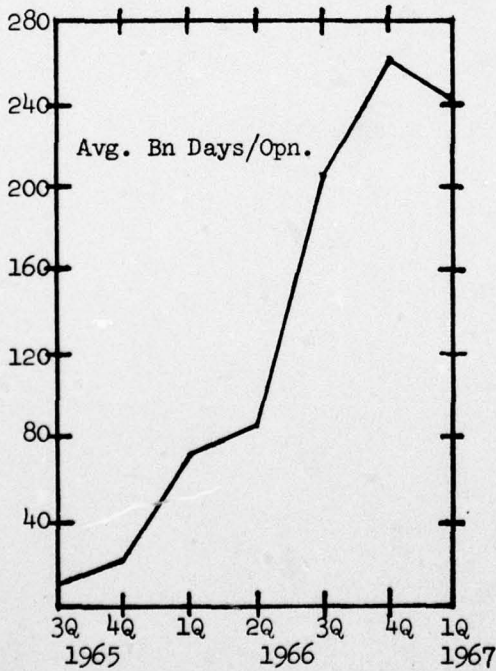
TABLE 1

U.S. ARMY SEARCH AND DESTROY OPERATIONS IN II CORPS

|                          | 1965  |       | 1966  |       |       |       | 1967  |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|
|                          | 3Q    | 4Q    | 1Q    | 2Q    | 3Q    | 4Q    | 1Q    |
| No. Operations <u>1/</u> | 7     | 11    | 9     | 12    | 6     | 7     | 8     |
| Avg Bns/Opn.             | 1.6   | 2.3   | 3.5   | 3.3   | 6.5   | 4.7   | 4.5   |
| Avg Bn Days/Opn.         | 10.3  | 22.6  | 71.9  | 86.1  | 207.7 | 263.9 | 245.1 |
| Avg VC/NVA KIA/Opn.      | 46.7  | 152.9 | 199.0 | 236.1 | 263.5 | 470.6 | 377.3 |
| VC/NVA KIA/Bn Day        | 4.54  | 6.76  | 2.77  | 2.74  | 1.27  | 1.78  | 1.54  |
| VC/NVA KIA/US KIA        | 13.63 | 5.53  | 5.83  | 8.64  | 10.13 | 9.89  | 6.38  |

1/ Operations are grouped by the quarter in which most of the operation took place. However, 4 operations took place in two quarters, e.g., Adams. These were divided into two operations and the results divided between quarters in proportion to the days in each quarter.

Source: NMCS Computer File, After Action Reports, and FEPAC Summary. Every effort was made to obtain all operations, but a few may have been missed due to missing records early in the war.



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TABLE 2

ARMY SEARCH AND DESTROY OPERATIONS IN II CORPS  
JANUARY 1, 1966 - APRIL 5, 1966

| SIZE                    |                      | RESULTS          |                |                   |                          |
|-------------------------|----------------------|------------------|----------------|-------------------|--------------------------|
| <u>Range of Bn Days</u> | <u>Bns Committed</u> | <u>No. Opers</u> | <u>Bn Days</u> | <u>VC/NVA KIA</u> | <u>VC/NVA KIA/Bn Day</u> |
| over 100                | 4 or more            | 11               | 3900           | 7123              | 1.83                     |
| over 100                | less than 4          | 7                | 1260           | 1511              | 1.20                     |
| 25-100                  | 4 or more            | 4                | 252            | 946               | 3.75                     |
| 25-100                  | less than 4          | 10               | 424            | 1499              | 3.54                     |

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## RVNAF EFFECTIVENESS

The discrepancies in effectiveness of the RVNAF in I, II, and III Corps are much greater than those of the U.S. in the same Corps. The better performance of the RVNAF in I CTZ than in II and III Corps supports the contention that the Marines are doing a better job of supporting and encouraging the RVNAF than is the Army, although there may be other reasons.

Search and Destroy Operations. RVNAF (ARVN, RF, PF and CIDG) effectiveness per battalion day on search and destroy operations during August 1966 through March 1967 was less than U.S. effectiveness, but only about 25% less when weighted by relative strengths. Table 1 also shows that RVNAF effectiveness is much higher in IV Corps and I Corps than in II and III Corps: e.g., enemy killed per battalion day of operation in I and IV Corps are 7 times better than III Corps and 3 times better than II Corps.

TABLE 1<sup>a/</sup>

### SEARCH AND DESTROY EFFECTIVENESS

|                             | <u>Corps Tactical Zones (CTZ)</u> |           |            |           | <u>Countrywide</u> |
|-----------------------------|-----------------------------------|-----------|------------|-----------|--------------------|
|                             | <u>I</u>                          | <u>II</u> | <u>III</u> | <u>IV</u> |                    |
| <u>RVNAF</u>                |                                   |           |            |           |                    |
| VC/NVA KIA per Bn Day       | 2.42                              | .69       | .34        | 2.40      | 1.27               |
| Weapons Captured per Bn Day | .45                               | .25       | .16        | 1.27      | .48                |
| VC/NVA KIA per RVNAF KIA    | 5.65                              | 6.43      | 4.52       | 10.85     | 6.93               |
| <u>U.S.</u>                 |                                   |           |            |           |                    |
| VC/NVA KIA per Bn Day       | 2.02                              | 1.56      | 1.62       | -         | 1.69               |
| Weapons Captured per Bn Day | .29                               | .50       | .55        | -         | .47                |
| VC/NVA KIA per US KIA       | 8.30                              | 8.39      | 7.76       | -         | 8.13               |

a/ Battalion days of operation are calculated by MACV on company days. The present-for-duty strength of a standard U.S. Army company is 263, of a standard U.S. Marine company 297, and a standard ARVN company 156. Using the U.S. Army company as the standard, the weighting factors used to develop Table 1 are 1.00, 1.13, and .59 respectively.

Small Unit Actions. RVNAF effectiveness in small unit actions also varies among the CTZ. Table 2 shows that RVNAF does the best in IV Corps. Unfortunately, the data available for the U.S. in the three northern CTZs are insufficient for comparison.

TABLE 2

### RVNAF EFFECTIVENESS ON SMALL UNIT ACTIONS

|                                      | <u>Corps Tactical Zones (CTZ)</u> |           |            |           | <u>Countrywide</u> |
|--------------------------------------|-----------------------------------|-----------|------------|-----------|--------------------|
|                                      | <u>I</u>                          | <u>II</u> | <u>III</u> | <u>IV</u> |                    |
| Contacts per 1000 Small Unit Actions | 1.97                              | 2.05      | 1.59       | 2.23      | 2.00               |
| VC/NVA KIA per Contact               | 3.61                              | 2.34      | 3.36       | 4.78      | 3.73               |

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Corps Ranking. Table 3 ranks the Corps on the basis of Tables 1 and 2. Assigning points to each rank (low score is best) shows that the RVNAF is most effective in IV Corps followed by I, II, and III Corps. The U.S. is equally effective in all three Corps. (These measures, however, ignore RVNAF and U.S. effectiveness in the pacification effort.)

TABLE 3

|  | <u>Rank</u> |            |            |            | <u>Overall<br/>Rankings</u> |
|--|-------------|------------|------------|------------|-----------------------------|
|  | <u>1st</u>  | <u>2nd</u> | <u>3rd</u> | <u>4th</u> |                             |
| <u>RVNAF Corps</u>                     |             |            |            |            |                             |
| VC/NVA KIA per Bn Day                  | I           | IV         | II         | III        | IV Corps - 6 points         |
| Weapons Captured per Bn Day            | IV          | I          | II         | III        | I Corps -11 points          |
| VC/NVA KIA per RVNAF KIA               | IV          | II         | I          | III        | II Corps -14 points         |
| Contacts per 1000 Small Unit<br>Action | IV          | II         | I          | III        | III Corps -19 points        |
| VC/NVA KIA per Contact                 | IV          | I          | III        | II         |                             |
| <u>U.S. Corps</u>                      |             |            |            |            |                             |
| VC/NVA KIA per Bn Day                  | I           | III        | II         |            | I Corps -6 points           |
| Weapons Captured per Bn Day            | III         | II         | I          |            | II Corps -6 points          |
| VC/NVA KIA per U.S. KIA                | II          | I          | III        |            | III Corps -6 points         |

# SECRET

## SVN INFLATION IN CY 67

CY 67 inflation can be held to 20-25%, recognizing periods of uncertainty (e.g., elections) and short-term shortage (e.g., rice). CY 67 inflation through 30 April has been 16%. A rate of inflation of 25% has the same effect on the incomes of GVN employees and members of the Armed Forces as cutting their salaries by 20%.

The MACV additions to the approved deployment plan would not appreciably affect piaster spending or inflation in CY 67 but would affect spending and possibly inflation in CY 68 and CY 69. Piaster cost per year of 15,000 troops is roughly Pl billion.

## The Dangers of Inflation

A modest degree of inflation in Vietnam could be helpful. Pressure from rising prices forces rural and urban families to seek additional income through higher paying jobs and secondary employment. Labor mobility and total output are thereby increased.

Also, several of the usual disadvantages of inflation are not applicable to SVN. For example, inflation usually leads to balance of payments difficulties as domestic and export prices become relatively higher and import prices become relatively lower. But in SVN the US military (who buy their piasters with dollars) supplies foreign exchange and US AID through CIP supplies imports. In SVN, the US commitment thus offsets the balance of payments effect of inflation.

Nonetheless, Vietnamese inflation in CY 66 was not modest: 80% per year or 6% per month. Such large price rises produce several ill effects in SVN.

In the first place, people on fixed incomes (notably civil servants and members of the armed services) are made relatively worse off as the purchasing power of their income drops. The government and the Army lose their best people since other positions become financially more attractive. Second, inflation breeds corruption as people try to supplement their income by other means if, like the military, they cannot change jobs.

Finally, popular support for the GVN is undermined if it is unable to effectively manage the country's economy.

## Causes of SVN Inflation

Inflation in SVN is caused by too much demand for a limited amount of local resources. The US, the GVN, the private economy (and to some extent even the VC) are all competing for a small amount of local resources often made yet smaller by war damage.

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The GVN prints money to meet its needs and those of the U.S., since it does not collect enough in taxes. Financing war-generated demands through increasing the money supply instead of through taxation adds new demands to the economy without cutting private demand. Inflation results.

Increases in the money supply will bring a proportionate increase in prices if all else remains equal. The phrase "if all else remains equal" is important. Price increases can be less than the increase in money supply. A growing economy makes more goods available and this reduces the price rise associated with increases in money supply. Similarly, in countries like Vietnam, substitution of a money economy for barter arrangements allows for some increase in money supply without creating price rises.

On the other hand, price rises can exceed increases in the money supply. Disproportionate price increases most often result from a loss of confidence in the currency. This loss of confidence, due to previous inflation or political-military factors, causes people to shift from holding money to holding goods. People are willing to pay higher prices for goods which they expect will cost even more in the near future.

In SVN increases in prices have been less than increases in the money supply until quite recently. (See Table 1). The change occurred in CY 66 when the money supply increased by slightly less than 50% and prices increased by slightly more than that figure.

The CY 66 trend appears to be continuing in CY 67, based on 1st Quarter results. Price rises in SVN currently are exceeding money supply increases by a ratio of 1.2 to 1, even allowing for the recent rice price increases resulting from a short-lived shortage.

### The Outlook for CY 67

Prices in SVN will rise 32% in CY 67 based on the P17 billion increase in money supply ("gap") estimated by the US mission and a 1.2 to 1 ratio. (See Tables 2 and 3). However, several factors may change the gap projection. Most significant is a lower estimate of US military piaster spending.

The "Piaster Ceiling." On July 1, 1966, the Secretary of Defense established a quarterly "piaster ceiling" whereby JCS was directed to limit (through CINCPAC and COMUSMACV) military and contractor piaster spending. The ceiling for each of the first two quarters was P9 billion. MACV spent P8.5 billion the first quarter and P9.08 billion the second, a total of only P17.6 billion against a forecast of P23.1 billion if no ceiling had existed. Such savings were the result of more careful buying, increased offshore procurement, greater efficiency in construction and a public campaign to induce troops to spend fewer piasters.

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In November 1966, CINCPAC/MACV estimated their CY piaster needs to be P44.5 billion. OSD at the same time estimated spending to be P41.7 billion for the year. It now appears that both estimates are too high. The CINCPAC/MACV Piaster Expenditure Reduction Program has been more effective more quickly than was anticipated. The latest OSD projection for CY 67 is only P36.4 billion. (Table 4).

Besides military piaster savings, two other factors may reduce the projected CY 67 gap. First, the P9 billion for subsidies (whereby rice and fertilizer are sold at a lower rate than P118 to \$1) may be overstated and may be only P4 billion. Second, credit expansion will probably be zero or negative instead of P1 billion.

All of these changes could reduce the projected gap to P2.9 billion. But some programs may be revised in a way that will increase it. First, COMUSMACV has requested an increase in the strength of the Vietnamese Armed Forces of 50,000 men starting 1 July. If all 50,000 were on board on 1 July (which is unlikely) GVN military spending would increase only P.9 billion in CY 67. Second, salaries of Vietnamese citizens working for the US Government may be raised, increasing expenditures by P2 billion.

Based on the above changes, CY 67 money supply increases would be only P5.8 billion. Using a ratio of increased prices to increases in money supply of 1.2 to 1, the inflation in SVN for CY 67 would be only 14%. (See Table 2.)

A 14% rate of inflation in SVN would be quite acceptable for CY 67 considering the much higher rates that have prevailed recently. However, particular shortages (e.g., the recent rice crisis) can cause the price of certain commodities to rise, and once prices have gone up they never fall back completely to their old levels. Also, several political periods of uneasiness (e.g., elections) this year could influence prices. Thus an inflation of 20 to 25% is likely.

There is still one large unknown factor which may alter the long run projections substantially. COMUSMACV has asked for additional forces by the end of CY 68.

No troop buildup is likely to disrupt the stabilization effort this year. Not many of them will reach SVN in CY 67. Roughly P1 billion will "buy" 15,000 troops per year or 30,000 troops for 6 months, so the CY 67 gap would probably not be increased by more than P1 or P2 billion.

But the long run implications of a large number of troops is more severe. Each 100,000 troops would cost more than P6.5 billion per year. While there are no gap projections beyond CY 67, economic stabilization is not likely to get much easier.

Piasters spent for US troops are piasters that cannot be spent for other purposes. The contribution to the military effort of these additional troops must be weighed against the contribution to the political effort of such actions as raising GVN salaries and to the military effort of RVNAF salary increases.

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TABLE 1

**END YEAR MONEY SUPPLY & RETAIL PRICE INDEX**

| <u>Year</u> | <u>Money Supply<br/>(P billions)</u> | <u>Saigon<br/>Retail Price Index</u> <sup>1/</sup> |
|-------------|--------------------------------------|--|
| 1961        | 17.2                                 | 79.3   |
| 1962        | 19.5                                 | 83.0   |
| 1963        | 22.3                                 | 86.0   |
| 1964        | 27.4                                 | 93.4   |
| 1965        | 47.6                                 | 128.2  |
| 1966        | 67.0                                 | 208.9  |

1/ Mid-1965 = 100.

DOWNWARD AND UPWARD TRENDS;  
DECLAS ... YEARS.  
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TABLE 2

CY 67 GAP

16 March Embassy Estimate  
(in P billions)

|  |                      | OSD Est.<br><u>Possible Gap</u> |
|--|----------------------|---------------------------------|
| <b>Monetary Injection</b>                      |                      |                                 |
| GVN Military                                   | P 44.8               | P 45.7                          |
| GVN Civil                                      | 33.0                 | 33.0                            |
| US Military                                    | 44.5                 | 36.4                            |
| US Civil                                       | 8.0                  | 10.0                            |
| Non-US Piaster Purchases                       | 3.3                  | 3.3                             |
| Exports  | 2.0                  | 2.0                             |
| Credit Expansion                               | 1.0                  | 0                               |
| Subsidies                                      | 9.0                  | 4.0                             |
| Total  | <u>P145.6</u>        | P134.4                          |
| <br>   |                      |                                 |
| <b>Monetary Withdrawals</b>                    |                      |                                 |
| GVN Imports                                    | P 31.8               | P 31.8                          |
| CIP Imports                                    | 18.9                 | 18.9                            |
| Food for Peace                                 | 13.6                 | 13.6                            |
| Special Rice Imports                           | 8.1                  | 8.1                             |
| Customs, Austerity and<br>Perequation Revenues | 19.6                 | 19.6                            |
| Domestic Revenues                              | 26.0                 | 26.0                            |
| Invisibles                                     | 10.6                 | 10.6                            |
| Total  | <u>P128.6</u>        | <u>P128.6</u>                   |
| <br>   |                      |                                 |
| GAP  | <u><u>P 17.0</u></u> | <u><u>P 5.8</u></u>             |

LOW GRADED AT 5 YEAR INTERVALS;  
DECLASSIFY AT 12 YEARS.  
DDI DIR 8200.10

May 15, 1967

**SECRET**

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TABLE 3  
POSSIBLE CY 67 MONEY SUPPLY INCREASES AND  
PRICE RISES

| <u>CY 67 Gap</u> | <u>% Change<br/>in Money Supply</u> <sup>1/</sup> | <u>% Change<br/>in Prices</u> <sup>2/</sup> |
|------------------|---|---|
| 10               | 15.8  | 19.0  |
| 15               | 23.7  | 28.4  |
| 17               | 26.8  | 32.2  |
| 20               | 31.5  | 37.8  |
| 25               | 39.4  | 47.3  |
| 30               | 47.3  | 56.8  |

1/ Changes as a percent of the end of CY 66 money supply net of MACV balances.

2/ Based on estimate that price rises will exceed money supply increases by a ratio of 1.2 to 1.

LOW GRADES AND UNCLASSIFIED;  
DECLASSIFIED ON 12-12-83.  
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TABLE 4

DOD PIASTER SPENDING CY 67

|                                  | <u>1st Q.</u> | <u>2nd Q.</u> | <u>3rd Q.</u> | <u>4th Q.</u> |
|----------------------------------|---------------|---------------|---------------|---------------|
| <b>Personal Spending</b>         |               |               |               |               |
| Per man per month                | \$24          | \$24          | \$24          | \$27          |
| Piasters (billions)              | P 3.5         | P 3.7         | P 3.8         | P 4.3         |
| <b>O&amp;M Spending</b>          |               |               |               |               |
| Per man per month                | \$43          | \$43          | \$40          | \$40          |
| Piasters (billions)              | P 4.2         | P 4.5         | P 4.2         | P 4.3         |
| <b>Construction Spending</b>     |               |               |               |               |
| WIP per month (millions)         | \$40          | \$40          | \$36          | \$27          |
| Piasters (billions)              | P 1.1         | P 1.1         | P 1.1         | P .7          |
| <b>Total Piasters (billions)</b> | <u>P 8.8</u>  | <u>P 9.3</u>  | <u>P 9.0</u>  | <u>P 9.3</u>  |

CY 67 Total: P36.4 billion

DOWN GRAD AT 3 YEAR INTERVALS;  
DECLASSIFY AT 12 YEARS.  
DOD DIR 5200.10

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TABLE 5

## RECENT SVN INFLATION

|             | <u>USAID Saigon Price Index</u> |                       |
|-------------|---------------------------------|-----------------------|
|             | <u>Including Rice</u>           | <u>Excluding Rice</u> |
| <u>1966</u> |                                 |                       |
| 1 Aug       | 219                             | 226                   |
| 1 Sep       | 215                             | 224                   |
| 1 Oct       | 209                             | 216                   |
| 1 Nov       | 225                             | 232                   |
| 1 Dec       | 230                             | 234                   |
| <u>1967</u> |                                 |                       |
| 1 Jan       | 225                             | 228                   |
| 1 Feb       | 254                             | 253                   |
| 1 Mar       | 255                             | 250                   |
| 1 Apr       | 261                             | 246                   |
| 1 May       | 260                             | 247                   |

# SECRET

## THE IMPACT OF OVERSEAS DOD EXPENDITURES FOR THE VIETNAM WAR ON THE US BALANCE OF PAYMENTS

The adverse impact of Vietnam on the US Balance of Payments has been grossly overstated. The actual impact of DOD overseas expenditures for the war is only one-third of the figure usually given. Termination of the war will not eliminate the Balance of Payments deficit.

Overseas DOD expenditures for the war in Vietnam have been cited in several government publications as a major factor in the \$1.7 billion reduction (from \$7.0 billion in CY 65 to \$5.3 billion in CY 66) in the net balance of goods and services, "the trade balance." Net US military expenditures overseas last year increased by \$.7 billion, in spite of substantially increased military equipment sales in Western Europe. Since overseas expenditures for the Vietnam war were \$.9 billion in CY 66, they would appear to be responsible for about 50% of the decline in the US trade balance and 20% of the \$4.5 billion CY 66 deficit.

However, only about one-third of the additional overseas expenditures, \$.3 billion in CY 66, had an unfavorable impact on the US Balance of Payments. The remaining two-thirds are offset by increased US exports induced by raising the incomes and foreign exchange holdings of the recipient countries. The fraction of a dollar of additional DOD expenditures overseas for Vietnam returned as a purchase of US exports ranges from 1.00 for Japan to .40 for the Philippines. In Vietnam, where the largest expenditures occur, 66 cents out of every DOD dollar is returned to the US through the purchase of US goods and services.

The following table shows by country the distribution of US military expenditures for Vietnam (based on the DOD Comptroller's estimates), the induced US exports, and the net dollar drain for calendar 1966, 1967, and 1968.

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**BALANCE OF PAYMENTS IMPACT ON OVERSEAS EXPENDITURES**  
(\$ millions)

|             | CY '66                                   |  |  | CY '67                                   |  |  |
|-------------|--|--|--|--|--|--|
|             | (1)<br>Net<br>Dollar<br>Drain<br>(2)-(3) | (2)<br>Addt'l DOD<br>Expendi-<br>tures Due<br>to Vietnam | (3)<br>US Exports<br>Induced by<br>DOD Expend-<br>itures | (1)<br>Net<br>Dollar<br>Drain<br>(2)-(3) | (2)<br>Addt'l DOD<br>Expendi-<br>tures Due<br>to Vietnam | (3)<br>US Exports<br>Induced by<br>DOD Expendi-<br>tures |
| Vietnam     | 95.9                                     | 281.9  | 186.0  | 139.3                                    | 409.7  | 270.4  |
| Ryukyus     | --                                       | 28.5   | 28.5   | --                                       | 38.7   | 38.7   |
| Japan       | --                                       | 107.2  | 107.2  | --                                       | 153.9  | 153.9  |
| Korea       | 16.0                                     | 64.0   | 48.0   | 24.7                                     | 98.8   | 74.1   |
| Taiwan      | 20.4                                     | 40.8   | 20.4   | 32.9                                     | 65.7   | 32.8   |
| Philippines | 48.9                                     | 81.5   | 32.6   | 58.9                                     | 98.2   | 39.3   |
| Thailand    | 53.3                                     | 108.7  | 55.4   | 70.8                                     | 144.4  | 73.6   |
| Australia   | .7                                       | 1.5  | .8   | .7                                       | 1.3  | .6   |
| Canada      | 9.9                                      | 36.7   | 26.8   | 12.9                                     | 47.6   | 34.7   |
| EEC Nations | 6.1                                      | 12.1   | 6.0  | 8.5                                      | 17.1   | 8.6  |
| All Other   | 28.3                                     | 56.6   | 28.3   | 42.4                                     | 84.8   | 42.4   |
| POL (M.E.)  | <u>50.4</u>                              | <u>126.1</u>   | <u>75.7</u>  | <u>57.6</u>                              | <u>144.0</u>   | <u>86.4</u>  |
|             | 329.9                                    | 945.6  | 615.7  | 448.7                                    | 1,304.2  | 855.5  |

CY POL estimated fr FY POL averages for years involved.

OVERSEAS EXPENDITURES

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| (3)   | CY '67                                   |  |  | CY '68                                   |  |  |
|-------|--|--|--|--|--|--|
|       | (1)<br>Net<br>Dollar<br>Drain<br>(2)-(3) | (2)<br>Addt'l DOD<br>Expendi-<br>tures Due<br>to Vietnam | (3)<br>US Exports<br>Induced by<br>DOD Expendi-<br>tures | (1)<br>Net<br>Dollar<br>Drain<br>(2)-(3) | (2)<br>Addt'l DOD<br>Expendi-<br>tures Due<br>to Vietnam | (3)<br>US Exports<br>Induced by<br>DOD Expendi-<br>tures |
| 186.0 | 139.3                                    | 409.7  | 270.4  | 91.6                                     | 269.5  | 177.9  |
| 28.5  | --                                       | 38.7   | 38.7   | --                                       | 20.0   | 20.0   |
| 107.2 | --                                       | 153.9  | 153.9  | --                                       | 97.8   | 97.8   |
| 48.0  | 24.7                                     | 98.8   | 74.1   | 15.2                                     | 60.7   | 45.5   |
| 20.4  | 32.9                                     | 65.7   | 32.8   | 20.4                                     | 40.8   | 20.4   |
| 32.6  | 58.9                                     | 98.2   | 39.3   | 38.3                                     | 63.8   | 25.5   |
| 55.4  | 70.8                                     | 144.4  | 73.6   | 49.1                                     | 100.3  | 51.2   |
| .8    | .7                                       | 1.3  | .6   | .1                                       | .2   | .1   |
| 26.8  | 12.9                                     | 47.6   | 34.7   | 7.5                                      | 27.6   | 20.1   |
| 6.0   | 8.5                                      | 17.1   | 8.6  | .9                                       | 1.8  | .9   |
| 28.3  | 42.4                                     | 84.8   | 42.4   | 21.2                                     | 42.4   | 21.2   |
| 75.7  | 57.6                                     | 144.0  | 86.4   | 36.6                                     | 91.6   | 55.0   |
| 515.7 | 448.7                                    | 1,304.2  | 855.5  | 280.9                                    | 816.5  | 535.6  |

Years involved.

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## AIRCRAFT LOSSES

Aircraft losses in April totaled 92, compared to the 118 in March and the Budget Plan projection of 122. We lost 40 fighter and attack aircraft, compared to 45 in March and the Budget Plan estimate of 62. Losses of one reconnaissance aircraft and 11 other fixed wing aircraft were both 6 below the plan; the 40 helicopter losses exceeded the plan by 4. The table below shows the excess of planned losses to actual losses from July 1965 through April 1967:

|                            | <u>Fighter/<br/>Attack</u> | <u>Recce/<br/>ECM</u> | <u>Other<br/>Fixed Wing</u> | <u>Helicopters</u> | <u>Total</u> |
|----------------------------|----------------------------|-----------------------|-----------------------------|--------------------|--------------|
| Actual Losses              | 818                        | 71                    | 217                         | 643                | 1749         |
| Planned Losses             | <u>965</u>                 | <u>96</u>             | <u>250</u>                  | <u>586</u>         | <u>1897</u>  |
| Excess Predicted<br>Losses | 147                        | 25                    | 33                          | (57)               | 148          |

## SEA Fighter and Attack Aircraft Losses - OSD April 1967 Estimate

As the table above indicates, losses of fighter and attack aircraft have been well below the December 1966 Plan in recent months. For this reason a new OSD April "Best Estimate" has been prepared for financial and production planning. The old estimate will be redesignated as the Budget Plan and will appear as such in the OSD SEA Statistical Summary.

Based on the new "Best Estimate", the US and VNAF will lose 437 fewer fighter-attack aircraft in the July 1965-December 1969 period (2333 versus 2770) than we thought last December (See Table 1). This 437 aircraft reduction consists of the 127 fewer aircraft actually lost than planned through March 1967 and 310 fewer projected losses during the period April 1967 through December 1969 based on our new loss rate projections. Assuming that the attrition rates now projected are correct, the 95% statistical confidence limits around the new estimate are  $\pm 79$  aircraft. The basis for the April "Best Estimate" is outlined below.

a. Methodology - We use 7 loss rates for each aircraft model (e.g., F-4, A-4) to predict aircraft losses: loss rates for attack and non-attack sorties for each of three areas (Laos, NVN, SVN), and a rate for all other losses (operational losses and losses on the ground).

We use 6 sortie rates for each aircraft model; an attack and non-attack sortie rate for each of three areas.

Finally, we have developed a "weather cycle" to apportion attack sorties between NVN, Laos and SVN in accordance with our observations of the shifts in sortie patterns between areas. The total sorties and losses per year are not influenced by the weather cycle. But, since month-by-month losses change sharply, the weather cycle aids in following seasonal changes.

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TABLE 1

**Sorties and Losses - Planned vs. Actual - Total U.S. and VNAF**

**Fighter and Attack Aircraft Only**

| ***** F Y 1 9 6 6 *****                     |       |       |       |       |       |       |        |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
|   | JUL   | ALG   | SEP   | OCT   | NOV   | DEC   | JAN    | FEB   | MAR   | APR   | MAY   |       |
| <b>PLANNED SORTIES - DECEMBER PLAN</b>      |       |       |       |       |       |       |        |       |       |       |       |       |
| ATTACK - SVN                                |       |       |       |       | 13661 | 11270 | 11566  | 12452 | 12705 | 12705 | 12705 | 12705 |
| - NVN                                       |       |       |       |       | 3964  | 3988  | 3988   | 3988  | 3988  | 3988  | 3988  | 3988  |
| - LAOS                                      |       |       |       |       | 1366  | 3500  | 4500   | 4500  | 4500  | 4500  | 4500  | 4500  |
| <b>SUB-TOTAL</b>                            |       |       |       |       | 18691 | 18758 | 20054  | 20940 | 21193 | 21193 | 21193 | 21193 |
| OTHER                                       |       |       |       |       | 3878  | 3890  | 3890   | 3981  | 4060  | 4060  | 4060  | 4060  |
| <b>TOTAL COMBAT</b>                         |       |       |       |       | 22569 | 22648 | 23944  | 24921 | 25253 | 25253 | 25253 | 25253 |
| <b>PLANNED SORTIES - CURRENT PLAN</b>       |       |       |       |       |       |       |        |       |       |       |       |       |
| ATTACK - SVN                                |       |       |       |       |       |       |        |       |       |       |       |       |
| - NVN                                       |       |       |       |       |       |       |        |       |       |       |       |       |
| - LAOS                                      |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>SUB-TOTAL</b>                            |       |       |       |       |       |       |        |       |       |       |       |       |
| OTHER                                       |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>TOTAL COMBAT</b>                         |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>ACTUAL SORTIES / April 1967 Estimate</b> |       |       |       |       |       |       |        |       |       |       |       |       |
| ATTACK - SVN                                | 9907  | 10988 | 11094 | 12090 | 12686 | 12763 | 11751  | 12950 | 15153 | 11291 | 11611 | 12000 |
| - NVN                                       | 3182  | 3465  | 4002  | 3468  | 3125  | 2178  | 132    | 2839  | 4497  | 5405  | 4467  | 7700  |
| - LAOS                                      | 1005  | 724   | 1041  | 966   | 1472  | 3003  | 8000   | 5262  | 6247  | 6844  | 4300  | 3000  |
| <b>SUB-TOTAL</b>                            | 14094 | 15177 | 16137 | 16524 | 17203 | 17964 | 19883  | 21021 | 25897 | 22740 | 20378 | 23000 |
| OTHER                                       | 3287  | 3331  | 3497  | 3859  | 3443  | 3471  | 4326   | 3852  | 4939  | 4628  | 3900  | 4000  |
| <b>TOTAL COMBAT</b>                         | 17381 | 18508 | 19634 | 20383 | 20646 | 21435 | 24209  | 24873 | 30836 | 27368 | 24358 | 27000 |
| *****                                       |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>PLANNED LOSSES - DECEMBER PLAN</b>       |       |       |       |       |       |       |        |       |       |       |       |       |
| ON ATTACK SORTIES - SVN                     |       |       |       |       | 9.6   | 7.2   | 7.9    | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   |
| - NVN                                       |       |       |       |       | 18.4  | 18.4  | 18.4   | 18.4  | 18.4  | 18.4  | 18.4  | 18.4  |
| - LAOS                                      |       |       |       |       | 2.7   | 3.8   | 4.9    | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| <b>SUB-TOTAL</b>                            |       |       |       |       | 28.7  | 29.4  | 31.2   | 32.3  | 32.3  | 32.3  | 32.3  | 32.3  |
| ON OTHER SORTIES                            |       |       |       |       | 1.9   | 1.9   | 1.9    | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| <b>ALL OTHER LOSSES</b>                     |       |       |       |       | 6.8   | 6.8   | 7.2    | 7.6   | 7.7   | 7.7   | 7.7   | 7.7   |
| <b>TOTAL LOSSES</b>                         |       |       |       |       | 37.4  | 38.1  | 40.3   | 41.8  | 41.9  | 41.9  | 41.9  | 41.9  |
| <b>PLANNED LOSSES - CURRENT PLAN</b>        |       |       |       |       |       |       |        |       |       |       |       |       |
| ON ATTACK SORTIES - SVN                     |       |       |       |       |       |       |        |       |       |       |       |       |
| - NVN                                       |       |       |       |       |       |       |        |       |       |       |       |       |
| - LAOS                                      |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>SUB TOTAL</b>                            |       |       |       |       |       |       |        |       |       |       |       |       |
| ON OTHER SORTIES                            |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>ALL OTHER LOSSES</b>                     |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>TOTAL LOSSES</b>                         |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>ACTUAL LOSSE / April 1967 Estimate</b>   |       |       |       |       |       |       |        |       |       |       |       |       |
| ON ATTACK SORTIES - SVN                     | 5.0   | 2.0   | 7.0   | 7.0   | 4.0   | 9.0   | 10.0   | 3.0   | 11.0  | 4.0   | 5.0   | 6.0   |
| - NVN                                       | 9.0   | 18.0  | 21.0  | 17.0  | 16.0  | 13.0  | 2.0    | 5.0   | 17.0  | 23.0  | 18.0  | 18.0  |
| - LAOS                                      | 3.0   | 0.0   | 1.0   | 1.0   | 0.0   | 1.0   | 6.0    | 10.0  | 2.0   | 6.0   | 7.0   | 7.0   |
| <b>SUB-TOTAL</b>                            | 17.0  | 20.0  | 29.0  | 25.0  | 20.0  | 23.0  | 18.0   | 18.0  | 30.0  | 33.0  | 30.0  | 31.0  |
| ON OTHER SORTIES                            | 2.0   | 2.0   | 2.0   | 3.0   | 3.0   | 2.0   | 0.0    | 2.0   | 1.0   | 5.0   | 1.0   | 1.0   |
| <b>ALL OTHER LOSSES</b>                     | 8.0   | 2.0   | 7.0   | 9.0   | 6.0   | 10.0  | 12.0   | 4.0   | 6.0   | 12.0  | 11.0  | 10.0  |
| <b>TOTAL LOSSES</b>                         | 27.0  | 24.0  | 38.0  | 37.0  | 29.0  | 35.0  | 30.0   | 24.0  | 37.0  | 50.0  | 42.0  | 41.0  |
| *****                                       |       |       |       |       |       |       |        |       |       |       |       |       |
| <b>LOSSES PER THOUSAND SORTIES</b>          |       |       |       |       |       |       |        |       |       |       |       |       |
| ON ATTACK SORTIES - SVN                     | .505  | .102  | .631  | .579  | .317  | .705  | .851   | .232  | .726  | .354  | .431  | .400  |
| - NVN                                       | 2.028 | 5.195 | 5.247 | 4.902 | 5.120 | 5.914 | 15.152 | 1.780 | 3.700 | 4.255 | 4.030 | 2.000 |
| - LAOS                                      | 2.985 | 0.0   | .961  | 1.035 | 0.0   | .333  | .750   | 1.900 | .300  | .993  | 1.620 | 0.0   |
| ON OTHER SORTIES                            | .600  | .600  | .572  | .777  | .871  | .576  | 0.0    | .519  | .202  | 1.000 | .251  | .200  |
| <b>ALL OTHER LOSSES</b>                     | .463  | .100  | .357  | .442  | .291  | .467  | .496   | .161  | .195  | .430  | .452  | .200  |

a/ Plan is as of 11 December 1965. Cum. totals include Jul-Oct 1965 actual data. Projection through CY 1969 is based upon June 1967.   
 b/ Plan is as of 18 November 1966, and force deployments planned in Program 4. Cum. totals include Jul 65-Oct 66 actual data.   
 c/ Beginning in November 1966, loss projections are based upon actual sortie and loss rates from November 1965 through October 1966.   
 d/ Rates have been computed by dividing the aircraft lost in each category by the appropriate total of sorties, and shown as per thousand.   
 e/ Beginning in November 1966 projections are based upon 3 CVA at Yankee Station and recent NVN sortie performance by USAF Thailand base.   
 f/ Beginning in April 1967, sortie and loss projections are based upon actual sortie and loss rates from July 1965 through March 1967.   
 Totals may not add due to rounding.

**SECRET**

| ***** F Y 1 9 6 7 ***** |        |       |       |       |       |          |       |       |       |       |       |       |       | *****  |       |       |       |
|-------------------------|--------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| JUN                     | TOTAL  | JUL   | AUG   | SEP   | OCT   | NOV      | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | TOTAL  | JUL   | AUG   | SEP   |
| 12785                   | 143848 | 13297 | 13297 | 13889 | 15585 | 17282    | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 194244 | 17282 | 17282 | 17282 |
| 3988                    | 45997  | 3988  | 3988  | 3988  | 3988  | 3988     | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 47856  | 3988  | 3988  | 3988  |
| 4588                    | 35382  | 4588  | 4588  | 4588  | 4588  | 4588     | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 54888  | 4588  | 4588  | 4588  |
| 21193                   | 225147 | 21785 | 21785 | 22377 | 23993 | 25778    | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 296188 | 25778 | 25778 | 25778 |
| 4868                    | 45853  | 4868  | 4868  | 4868  | 4868  | 4868     | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 48728  | 4868  | 4868  | 4868  |
| 25253                   | 271888 | 25845 | 25845 | 26437 | 28853 | 29838    | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 344828 | 29838 | 29838 | 29838 |
|                         |        |       |       |       |       | b/ 13889 | 14567 | 14689 | 14720 | 14181 | 13781 | 14466 | 14348 | 167884 | 13989 | 13989 | 13989 |
|                         |        |       |       |       |       | 18882    | 9579  | 9725  | 9698  | 9798  | 18236 | 18111 | 18746 | 122889 | 18819 | 18791 | 18791 |
|                         |        |       |       |       |       | 4212     | 4422  | 4999  | 4834  | 4731  | 4387  | 3566  | 3185  | 48581  | 2792  | 2886  | 2886  |
|                         |        |       |       |       |       | 27823    | 28568 | 29333 | 29252 | 28638 | 28244 | 28143 | 28279 | 331274 | 27688 | 27586 | 27586 |
|                         |        |       |       |       |       | 5454     | 5488  | 5586  | 5531  | 5522  | 5476  | 5416  | 5111  | 63281  | 5125  | 5151  | 5151  |
|                         |        |       |       |       |       | 33277    | 34856 | 34919 | 34783 | 34152 | 33728 | 33559 | 33398 | 394555 | 32725 | 32737 | 32737 |
| 12672                   | 144876 | 14939 | 14081 | 12798 | 11748 | 13024    | 13264 | 14526 | 13601 | 16786 | 13283 | 12467 | 12293 | 148810 | 12993 | 13555 | 13495 |
| 7788                    | 44538  | 10198 | 11811 | 12249 | 8656  | 7261     | 6672  | 6572  | 5472  | 8502  | 8898  | 18472 | 11880 | 108636 | 12997 | 12953 | 12788 |
| 3442                    | 41586  | 2134  | 820   | 1261  | 2310  | 3027     | 4841  | 5484  | 6677  | 5109  | 4573  | 3807  | 2642  | 42687  | 1749  | 1369  | 1788  |
| 23982                   | 238928 | 27271 | 26712 | 26308 | 22714 | 23312    | 24777 | 26582 | 25750 | 30397 | 26747 | 26747 | 26816 | 318134 | 26940 | 27877 | 27883 |
| 4477                    | 47898  | 5167  | 4963  | 4860  | 4797  | 4554     | 5001  | 4666  | 4436  | 4994  | 4954  | 4954  | 4791  | 58138  | 4549  | 4585  | 4603  |
| 28379                   | 278818 | 32438 | 31675 | 31168 | 27511 | 27866    | 29778 | 31248 | 30186 | 35391 | 31701 | 31701 | 31608 | 372272 | 31490 | 32463 | 32487 |
| 9.8                     | 98.7   | 9.6   | 9.6   | 18.4  | 12.6  | 15.8     | 15.8  | 15.8  | 15.8  | 15.8  | 15.8  | 15.8  | 15.8  | 162.2  | 15.8  | 15.8  | 15.8  |
| 18.4                    | 212.2  | 18.4  | 18.4  | 18.4  | 18.4  | 18.4     | 18.4  | 18.4  | 18.4  | 18.4  | 18.4  | 18.4  | 18.4  | 228.8  | 18.4  | 18.4  | 18.4  |
| 4.9                     | 38.9   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9      | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   | 58.8   | 4.9   | 4.9   | 4.9   |
| 32.3                    | 341.8  | 32.9  | 32.9  | 33.7  | 35.9  | 38.3     | 38.3  | 38.3  | 38.3  | 38.3  | 38.3  | 38.3  | 38.3  | 441.8  | 38.3  | 38.3  | 38.3  |
| 1.9                     | 24.2   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9      | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 22.8   | 1.9   | 1.9   | 1.9   |
| 7.7                     | 85.2   | 7.9   | 7.9   | 8.2   | 8.6   | 9.2      | 9.2   | 9.2   | 9.2   | 9.2   | 9.2   | 9.2   | 9.2   | 186.2  | 9.2   | 9.2   | 9.2   |
| 41.9                    | 451.2  | 42.7  | 42.7  | 43.8  | 46.4  | 49.4     | 49.4  | 49.4  | 49.4  | 49.4  | 49.4  | 49.4  | 49.4  | 578.8  | 49.4  | 49.4  | 49.4  |
|                         |        |       |       |       |       | s/s/ 6.8 | 7.1   | 7.2   | 7.3   | 6.6   | 6.4   | 6.8   | 6.9   | 81.1   | 6.5   | 6.5   | 6.5   |
|                         |        |       |       |       |       | 32.3     | 38.1  | 38.8  | 32.9  | 33.6  | 35.8  | 34.8  | 35.8  | 388.3  | 36.2  | 33.5  | 33.5  |
|                         |        |       |       |       |       | 4.7      | 5.2   | 5.7   | 5.6   | 5.4   | 5.8   | 4.5   | 4.1   | 46.2   | 3.6   | 3.7   | 3.7   |
|                         |        |       |       |       |       | 43.8     | 42.4  | 43.7  | 45.8  | 45.6  | 46.4  | 46.1  | 46.8  | 507.6  | 46.3  | 43.7  | 43.7  |
|                         |        |       |       |       |       | 4.7      | 4.5   | 4.8   | 5.3   | 5.5   | 5.5   | 5.4   | 5.3   | 55.8   | 5.3   | 4.5   | 4.5   |
|                         |        |       |       |       |       | 18.8     | 9.8   | 18.8  | 18.4  | 18.4  | 18.4  | 18.3  | 18.3  | 115.6  | 18.3  | 9.5   | 9.5   |
|                         |        |       |       |       |       | 58.5     | 56.7  | 58.5  | 61.5  | 61.5  | 62.3  | 61.8  | 62.4  | 678.8  | 61.6  | 57.7  | 57.7  |
| 6.8                     | 73.8   | 7.0   | 3.8   | 8.0   | 8.0   | 5.0      | 7.0   | 6.0   | 5.0   | 8.0   | 6.9   | 6.3   | 6.4   | 76.6   | 6.7   | 7.2   | 7.2   |
| 18.8                    | 177.8  | 35.2  | 38.8  | 33.8  | 17.0  | 15.8     | 14.0  | 12.0  | 4.0   | 21.0  | 23.8  | 27.6  | 31.0  | 263.5  | 32.7  | 33.2  | 32.4  |
| 3.8                     | 40.0   | 8.0   | 1.8   | 1.8   | 4.0   | 3.8      | 1.0   | 3.0   | 5.0   | 2.0   | 4.6   | 4.3   | 3.2   | 32.0   | 2.2   | 1.7   | 2.4   |
| 27.8                    | 290.0  | 42.0  | 34.8  | 42.0  | 29.0  | 23.0     | 22.0  | 21.0  | 14.0  | 31.0  | 35.3  | 38.3  | 40.5  | 372.1  | 41.5  | 42.1  | 42.1  |
| 1.8                     | 24.8   | 5.8   | 3.8   | 3.8   | 3.0   | 2.8      | 5.0   | 4.0   | 0.0   | 1.0   | 2.2   | 2.4   | 2.4   | 33.0   | 2.6   | 2.4   | 2.4   |
| 18.8                    | 97.0   | 6.0   | 16.8  | 8.8   | 5.0   | 8.0      | 6.0   | 11.0  | 9.0   | 13.0  | 9.5   | 9.5   | 9.5   | 118.4  | 8.9   | 8.9   | 8.9   |
| 38.8                    | 411.8  | 53.8  | 53.8  | 53.0  | 37.0  | 33.8     | 33.0  | 36.0  | 23.0  | 45.0  | 47.0  | 50.1  | 52.4  | 515.5  | 53.0  | 53.4  | 53.2  |
| .473                    | .584   | .469  | .213  | .625  | .681  | .384     | .528  | .413  | .369  | .477  |       |       |       |        |       |       |       |
| 2.311                   | 3.974  | 3.432 | 2.542 | 2.694 | 1.964 | 2.366    | 2.098 | 1.826 | .730  | 2.473 |       |       |       |        |       |       |       |
| .872                    | .963   | 8.0   | 1.228 | .793  | 1.732 | .991     | .807  | .547  | .775  | .410  |       |       |       |        |       |       |       |
| .223                    | .518   | .968  | .624  | .619  | .625  | .453     | 1.035 | .857  | 0.0   | .207  |       |       |       |        |       |       |       |
| .352                    | .349   | .185  | .525  | .257  | .182  | .889     | .169  | .352  | .303  | .372  |       |       |       |        |       |       |       |

7. Extrapolated through December 1969 for comparative purposes only.

Cum. totals include July 1965-October 1966 actual data.  
 and sorties. Rates for "All Other Losses are against total combat sorties.  
 and attack aircraft.

March 1967 (except NVN loss rates, which were calculated from Apr. 1966 - March 1967 actual data). Cumulative totals include July 1965 - March 1967

2.

| F Y 1 9 6 8 |       |       |       |       |       |       |       |       |       |       |        |        | FY 1969 | FY 1970 | JUL 65- | JUL 65- |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|---------|---------|---------|---------|
| AUG         | SEP   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | TOTAL  | TOTAL  | JUL-DEC | DEC 69  | MAR 67  |         |
| 17282       | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 17282 | 207384 | 207384 | 183692  | 856552  | 286246  |         |
| 3988        | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 3988  | 47856  | 47856  | 23928   | 213493  | 81889   |         |
| 4588        | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 4588  | 54888  | 54888  | 27888   | 224382  | 75888   |         |
| 25778       | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 25778 | 389248 | 389248 | 154628  | 1294347 | 443937  |         |
| 4868        | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 4868  | 48728  | 48728  | 24368   | 216373  | 82393   |         |
| 29838       | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 29838 | 357968 | 357968 | 178988  | 1518728 | 526330  |         |
| 13989       | 13989 | 13433 | 13542 | 13118 | 13218 | 12725 | 12725 | 13872 | 13897 | 12861 | 159758 | 163117 | 88126   | 712753  | 270845  |         |
| 18791       | 18791 | 18964 | 18883 | 9876  | 9745  | 9557  | 9563  | 18223 | 18853 | 11943 | 125288 | 124468 | 58468   | 475483  | 13624   |         |
| 2886        | 2886  | 2833  | 3533  | 4349  | 4194  | 4964  | 4951  | 4384  | 3649  | 2824  | 44885  | 42672  | 21183   | 189947  | 7188    |         |
| 27586       | 27586 | 27238 | 27158 | 27335 | 27157 | 27246 | 27239 | 27599 | 27599 | 27628 | 328963 | 327249 | 159777  | 1378183 | 477528  |         |
| 5151        | 5151  | 5117  | 5111  | 5453  | 5474  | 5454  | 5439  | 5453  | 5453  | 5327  | 63788  | 63607  | 30512   | 268198  | 94368   |         |
| 32737       | 32737 | 32347 | 32269 | 32788 | 32631 | 32788 | 32678 | 33852 | 33852 | 32955 | 392671 | 390856 | 190889  | 1646381 | 571896  |         |
| 13555       | 13495 | 14251 | 14995 | 14848 | 14161 | 13670 | 14385 | 13146 | 12449 | 12227 | 163780 | 160624 | 78004   | 710095  | 269643  |         |
| 12953       | 12788 | 10328 | 9062  | 7940  | 7852  | 7266  | 7753  | 9175  | 10738 | 12129 | 120585 | 122060 | 67800   | 463620  | 121931  |         |
| 1369        | 1369  | 1387  | 4033  | 5062  | 4915  | 6024  | 4821  | 4610  | 3744  | 2601  | 43916  | 44521  | 18215   | 190846  | 73169   |         |
| 27877       | 27883 | 27966 | 28087 | 27848 | 26929 | 26967 | 26961 | 26932 | 26932 | 26957 | 328284 | 327201 | 164015  | 1364555 | 464743  |         |
| 4585        | 4603  | 4558  | 4609  | 4647  | 4721  | 4678  | 4659  | 4719  | 4719  | 4639  | 55733  | 55437  | 28742   | 245142  | 90528   |         |
| 32463       | 32487 | 32565 | 32697 | 32496 | 31651 | 31646 | 31621 | 31651 | 31651 | 31597 | 384018 | 382639 | 192757  | 1609697 | 555271  |         |

| April 1967 |      |      |      |      |      |      |      |      |      |      |       |       | Estimate (4-1/2 yrs) | Dec Plan (4-1/2 yrs) | Current Plan (4-1/2 yrs) | Actual |
|------------|------|------|------|------|------|------|------|------|------|------|-------|-------|----------------------|----------------------|--------------------------|--------|
| 15.8       | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 188.8 | 188.8 | 98.2                 | 722.9                | 207.9                    |        |
| 18.4       | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 228.8 | 228.8 | 118.4                | 925.8                | 377.8                    |        |
| 4.9        | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 58.8  | 58.8  | 29.4                 | 244.7                | 83.0                     |        |
| 38.3       | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 459.6 | 459.6 | 229.8                | 1932.6               | 668.7                    |        |
| 1.9        | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 22.8  | 22.8  | 11.4                 | 184.8                | 41.3                     |        |
| 9.2        | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 9.2  | 118.4 | 118.4 | 55.2                 | 467.4                | 163.8                    |        |
| 49.4       | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 49.4 | 592.8 | 592.8 | 296.4                | 2584.2               | 873.8                    |        |
| 6.5        | 6.5  | 6.4  | 6.4  | 6.2  | 6.3  | 5.9  | 5.9  | 6.8  | 6.8  | 6.8  | 74.6  | 78.3  | 33.4                 | 332.4                | 134.0                    |        |
| 33.5       | 33.5 | 33.9 | 31.5 | 29.7 | 29.8 | 38.4 | 31.6 | 33.1 | 35.6 | 39.4 | 398.2 | 384.7 | 192.3                | 1532.5               | 451.7                    |        |
| 3.7        | 3.7  | 3.5  | 4.2  | 5.8  | 5.8  | 5.3  | 5.2  | 4.6  | 4.8  | 3.2  | 51.8  | 47.6  | 24.8                 | 208.8                | 72.6                     |        |
| 43.7       | 43.7 | 43.8 | 42.1 | 48.9 | 41.1 | 41.6 | 42.7 | 43.7 | 45.6 | 48.6 | 923.8 | 582.6 | 249.7                | 2073.7               | 658.3                    |        |
| 4.5        | 4.5  | 4.1  | 4.1  | 3.8  | 3.9  | 4.3  | 4.7  | 4.8  | 4.7  | 4.7  | 53.4  | 51.3  | 23.1                 | 286.8                | 62.8                     |        |
| 9.5        | 9.5  | 9.2  | 9.3  | 9.1  | 9.8  | 9.3  | 9.5  | 9.6  | 9.6  | 9.7  | 113.3 | 189.5 | 54.8                 | 489.4                | 181.6                    |        |
| 57.7       | 57.7 | 57.1 | 55.5 | 53.8 | 54.8 | 55.2 | 56.9 | 58.1 | 59.9 | 63.8 | 698.5 | 663.4 | 326.8                | 2789.9               | 902.7                    |        |
| 7.2        | 7.2  | 7.6  | 8.1  | 8.0  | 7.6  | 7.3  | 7.8  | 7.0  | 6.7  | 6.6  | 87.8  | 83.8  | 39.6                 | 360.8                | 130.0                    |        |
| 33.2       | 32.4 | 26.5 | 24.0 | 20.4 | 20.1 | 18.6 | 19.8 | 23.0 | 26.6 | 30.0 | 307.0 | 302.0 | 173.2                | 1222.6               | 358.0                    |        |
| 1.7        | 2.4  | 3.8  | 4.2  | 5.1  | 4.5  | 5.3  | 3.9  | 4.2  | 3.8  | 2.8  | 43.9  | 40.6  | 16.1                 | 172.7                | 60.0                     |        |
| 42.1       | 42.1 | 37.5 | 36.2 | 33.5 | 32.2 | 31.2 | 31.5 | 34.2 | 37.0 | 39.4 | 438.7 | 426.4 | 228.9                | 1756.1               | 548.0                    |        |
| 2.4        | 2.4  | 2.1  | 2.0  | 1.8  | 1.6  | 1.7  | 1.7  | 2.0  | 2.1  | 2.2  | 24.7  | 23.9  | 14.3                 | 127.8                | 58.0                     |        |
| 8.9        | 8.9  | 8.8  | 8.9  | 8.7  | 8.2  | 8.3  | 8.4  | 8.3  | 8.3  | 8.4  | 103.0 | 96.9  | 49.9                 | 449.2                | 171.0                    |        |
| 53.4       | 53.2 | 48.5 | 47.1 | 43.9 | 41.9 | 41.3 | 41.6 | 44.5 | 47.5 | 50.0 | 566.4 | 547.2 | 293.0                | 2333.1               | 777.0                    |        |

Source - Plan Sys Anal  
Actual JCS

10 May 1967

July 1965 - March 1967 actual data.

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b. Forces and Sorties - Sorties are a product of forces and sortie rates. We have used Program 4 forces through Change 25, plus an F-4 squadron for PRACTICE NINE. However, the forces were slightly changed when initial runs of this attrition estimate showed that we could retain certain aircraft longer than anticipated in Program 4. For instance, 1 F-105 squadron is not replaced by an F-4 squadron because of the lower F-105 loss rate.

Sortie rates are based on the 21 month period of July 1965-March 1967 instead of a 9-month moving average used in previous estimates. The reasons for the change are that variations have been random and the longer period gives a statistically better sample. We now predict 1.61 million sorties in the 1 July 1965-31 December 1969 period instead of 1.64 million, about 2% less.

c. Loss Rates - Past estimates have used a 9-month period for loss rate projections. The new estimate uses 21 months (July 1965-March 1967) for all loss rates except in NVN. While loss rates have fluctuated sharply from month to month, they show no trends except in NVN. Since we are predicting losses for 26 aircraft models using 7 loss rates, the need for a large sample size dictates the use of the longest stable period possible.

The NVN attack loss rate has not stabilized, as is shown for the Air Force and the Navy on Charts 1 and 2. This rate is critical since it determines about half of all losses. The table below compares projected losses using several reasonable NVN attack loss rates:

| <u>Base Period</u> | <u>Loss Rate per<br/>1000 Sorties</u> | <u>Projected Losses<br/>Apr 67 - Dec 69 a/</u> |
|--------------------|---------------------------------------|--|
| Jul 65 - Mar 67    | 2.94                                  | 1005   |
| Apr 66 - Mar 67    | 2.53                                  | 864  |
| Jul 66 - Mar 67    | 2.31                                  | 790  |
| Oct 66 - Mar 67    | 1.92                                  | 656  |

a/Based on 342,000 sorties in 33-month period.

The choice of an NVN attack loss rate is a matter of judgement. We improve our equipment and tactics and so do the North Vietnamese. So far, we are improving faster than they are but this could change. Furthermore, if we increase the proportion of sorties in northern North Vietnam (Route Packages 5 and 6) our loss rates on these sorties would increase by a factor of 3 to 5, as the table below indicates.

|                   | <u>Month Average</u> |                      |                      |
|-------------------|----------------------|----------------------|----------------------|
|                   | <u>Apr-Sep 66</u>    | <u>Oct 66-Mar 67</u> | <u>Apr 66-Mar 67</u> |
| <b>Sorties</b>    |                      |                      |                      |
| Rt. Pack. I-IV    | 7686                 | 6221                 | 6953                 |
| Rt. Pack V-VI     | 967                  | 968                  | 968                  |
| Total             | 8653                 | 7189                 | 7921                 |
| <b>Loss Rates</b> |                      |                      |                      |
| Rt. Pack. I-IV    | 1.84                 | 1.47                 | 1.68                 |
| Rt. Pack. V-VI    | 12.41                | 4.81                 | 8.60                 |
| Total             | 3.02                 | 1.92                 | 2.53                 |

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If we used a 9 month moving average to estimate NVN loss rates, the loss rate would be 2.31 and losses in the Apr 67-Dec 69 period would total 790. This rate would permit about 25% of the NVN sorties to be flown in Route Packages V and VI if the loss rates of the last 6 months continue, or it would allow a loss rate of about 9.8 in Routes V and VI, if we continue to fly about 11% of the NVN attack sorties in them and if the rate in Route Packages I - IV does not exceed 1.5.

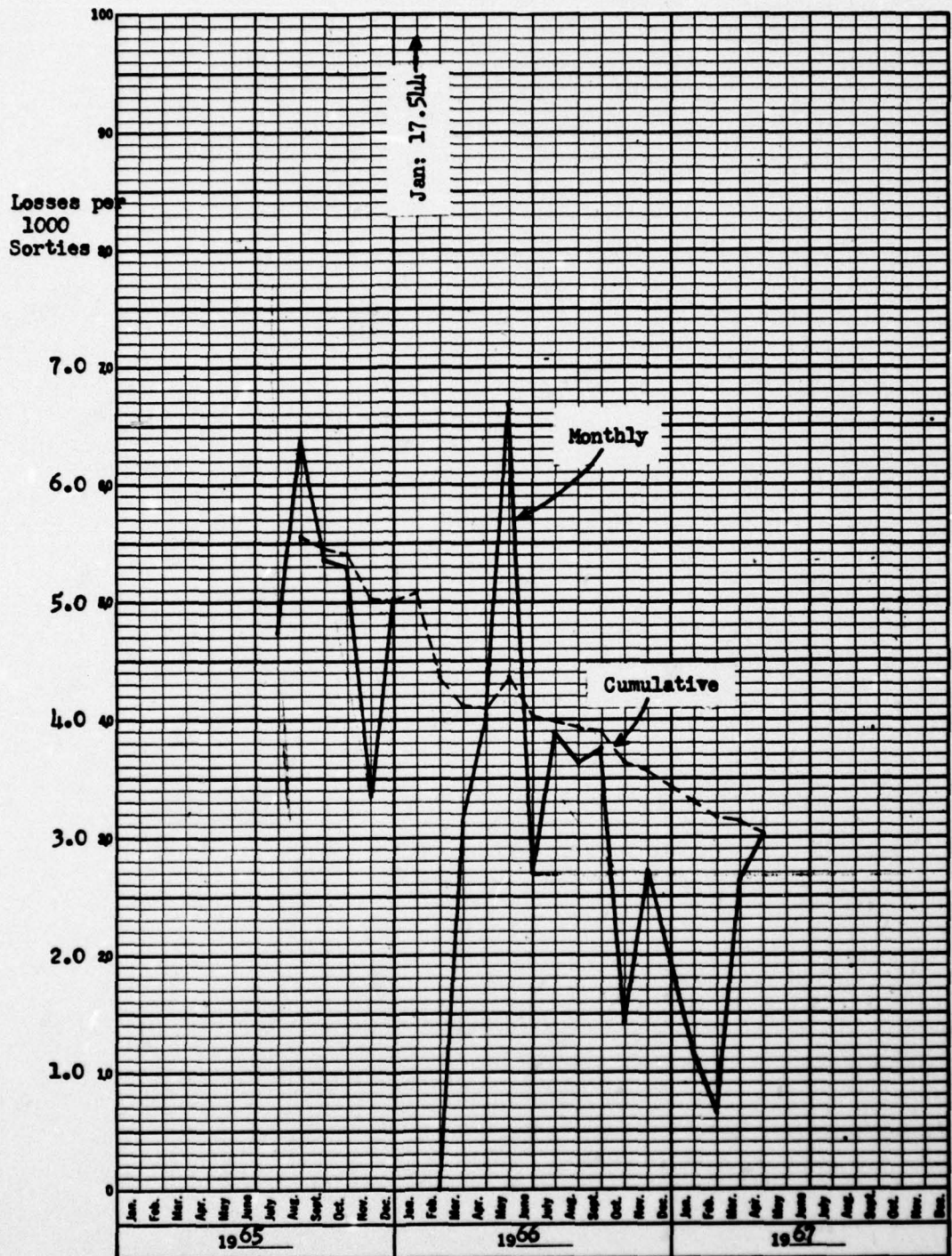
The 9 month attack rate, however, might prove too low if we fly an extended campaign against highly defended targets in the Hanoi - Haiphong areas. Loss rates of 10 to 20 aircraft per 1,000 sorties are likely in such strikes. It would also prove too low if the North Vietnamese receive SA-3 missile systems, REDEYE/CHAPEREL type infrared missile system, or if they rapidly learn how to use better the equipment they now have.

Therefore, to be on the safe side, we used the 2.53 rate of the last 12 months (Apr 66-Mar 67). Thus we project 864 attack losses in NVN from April 1967 through December 1969. The use of this loss rate provides a hedge against increased losses due to deployment of 3-4 more squadrons or a possible extensive campaign against heavily defended targets in the Hanoi-Haiphong area.

In brief, the NVN attack loss rate is the key factor, has a large range of variability, and is highly subject to targeting decisions which we do not know. The loss rate of 2.53 used in the April estimate is unlikely to result in either a large over-estimate or under-estimate of losses, but some uncertainty is unavoidable.

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CHART 1  
ATTACK LOSS RATES - NVN  
FIGHTER AND ATTACK AIRCRAFT - U.S. AIR FORCE

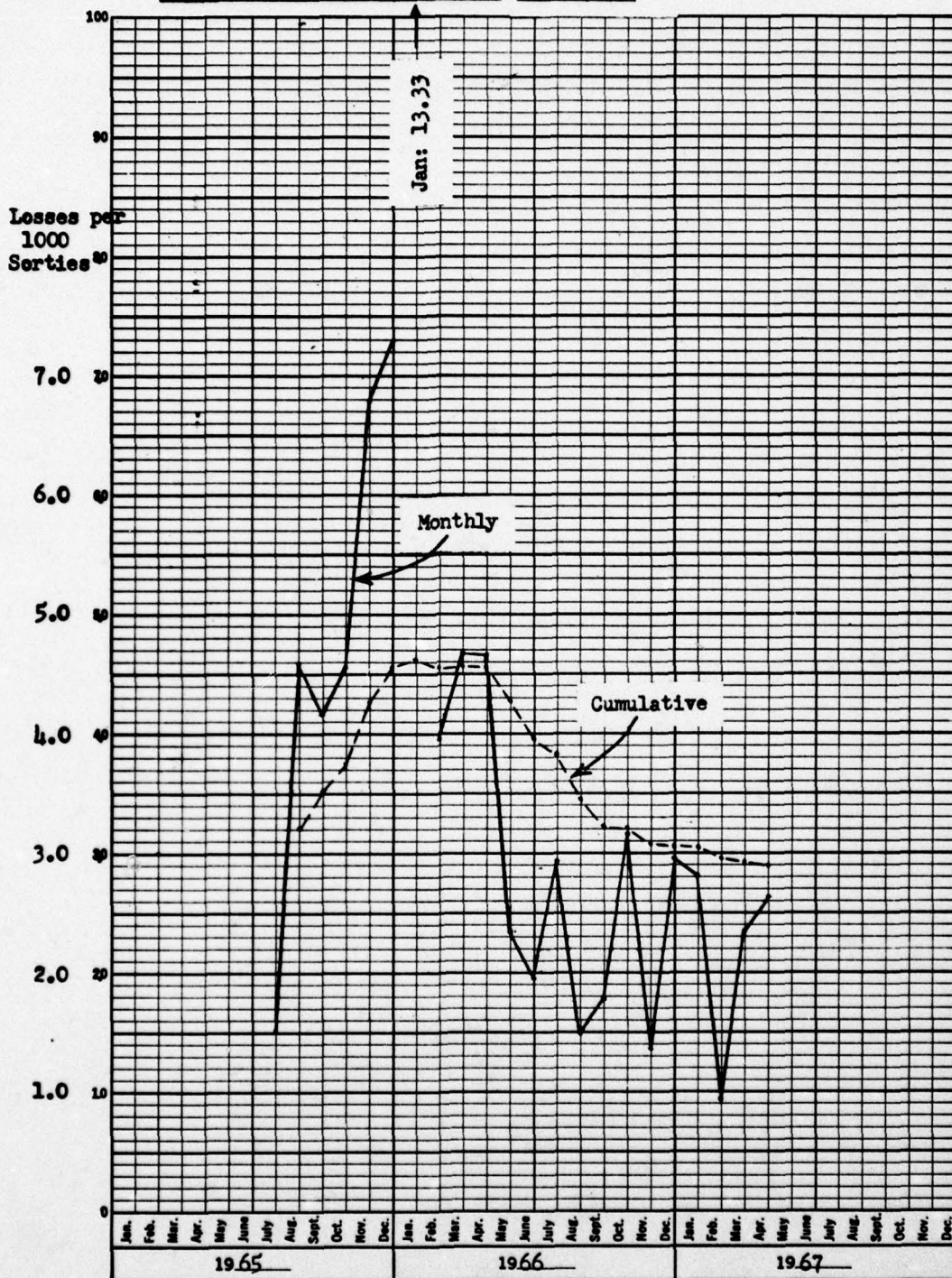


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CHART 2  
ATTACK LOSS RATES \* NVN  
FIGHTER AND ATTACK AIRCRAFT - U. S. NAVY



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## AIRCRAFT DESTROYED ON THE GROUND BY HOSTILE ACTION

Of 1599 U.S. aircraft lost to all causes in SEA from July 1965 through March 1967, 51 or 3% were destroyed on the ground by enemy action. Thirty-five of the 51 lost were helicopters; of these, 23 were UH-1s.

Thirty-one of the losses occurred during the first three quarters of FY 1966; only 11 occurred during the same period in FY 1967. While only one aircraft was destroyed in April 1967, 4 have been lost already in May in the attack on Bien Hoa.

Losses on the ground are difficult to predict since they are due to isolated, sporadic, and random enemy thrusts. Nevertheless, the OSD loss predictions include losses on the ground (and operational or non-combat losses) in the "All Other Losses" category in the Table 330 series, OSD Statistical Summary.

### AIRCRAFT DESTROYED BY HOSTILE ACTION ON THE GROUND

|                         | FY 1966 |    |    |    | FY 1967 |    |    | TOTAL |
|-------------------------|---------|----|----|----|---------|----|----|-------|
|                         | 1Q      | 2Q | 3Q | 4Q | 1Q      | 2Q | 3Q |       |
| <u>Fighter/Attack</u>   |         |    |    |    |         |    |    |       |
| F-102-AF                | 3       | -  | -  | -  | -       | -  | -  | 3     |
| A-1-AF                  | -       | -  | -  | 2  | -       | -  | -  | 2     |
| A-4-USMC                | -       | 2  | -  | -  | -       | -  | -  | 2     |
| SUB TOTAL               | 3       | 2  | -  | 2  | -       | -  | -  | 7     |
| <u>Other Fixed Wing</u> |         |    |    |    |         |    |    |       |
| C-123-AF                | -       | -  | -  | 1  | -       | -  | -  | 1     |
| C-HC-130-AF             | 3       | -  | -  | -  | -       | -  | -  | 3     |
| O-1-A                   | -       | -  | -  | 3  | -       | -  | -  | 3     |
| CV-2-A                  | -       | -  | -  | -  | 1       | -  | -  | 1     |
| U-8-A                   | -       | -  | -  | -  | -       | -  | 1  | 1     |
| SUB TOTAL               | 3       | -  | -  | 4  | 1       | -  | 1  | 9     |
| <u>Helicopters</u>      |         |    |    |    |         |    |    |       |
| HH-43-AF                | -       | -  | -  | -  | 1       | -  | 0  | 1     |
| UH-1-MC                 | -       | 13 | -  | -  | -       | -  | -  | 13    |
| UH-34-MC                | -       | 6  | -  | -  | -       | -  | -  | 6     |
| UH-1-A                  | -       | -  | -  | 3  | 4       | 1  | 2  | 10    |
| OH-13-A                 | -       | -  | 1  | -  | 1       | -  | -  | 2     |
| CH-37-A                 | -       | -  | 1  | -  | -       | -  | -  | 1     |
| CH-47-A                 | -       | -  | 2  | -  | -       | -  | -  | 2     |
| SUB TOTAL               | -       | 19 | 4  | 3  | 6       | 1  | 2  | 35    |
| TOTAL U.S.              | 6       | 21 | 4  | 9  | 7       | 1  | 3  | 51    |

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## ANALYSIS OF AIRCRAFT ORDNANCE CONSUMPTION

Southeast Asia ordnance expenditures totaled 76,700 tons in April, 4% less than the 79,800 tons predicted for the month. The primary reason for the difference was low B-52 load factors. We still expect SEA consumption to level at about 80,000 tons.

USAF-TAC loads may be constrained by the 38.6 days of 500/750# GP bomb stocks. The USN/USMC 500/750# bomb stocks remained relatively high at 63.5 days (see table on the next page).

The CINCPAC allocation is approximately 83,000 tons for the next three months and the CINCPAC requirement about 91,000 tons.

|                           | <u>April Estimate</u> | <u>April Actual</u> |
|---------------------------|-----------------------|---------------------|
| <u>Attack Sorties</u>     |                       |                     |
| USN/USMC                  | 9906                  | 10309               |
| USAF-TAC                  | 16007                 | 17103               |
| B-52                      | 800                   | 823                 |
| <u>Tons/Attack Sortie</u> |                       |                     |
| USN/USMC                  | 1.95                  | 1.83                |
| USAF-TAC                  | 1.90                  | 1.83                |
| B-52                      | 30.0                  | 25.5                |
| <u>Thousands of Tons</u>  |                       |                     |
| USN/USMC                  | 19.3                  | 18.9                |
| USAF-TAC                  | 30.4                  | 30.9                |
| B-52                      | 24.0                  | 21.0                |
| MAP                       | 4.5                   | 4.0                 |
| Army                      | 1.6                   | 1.9                 |
| Total Tons                | 79.8                  | 76.7                |

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ACTUAL/ESTIMATED AIRCRAFT ORDNANCE CONSUMPTION <sup>a/</sup>

|   | ACTUAL  |        |        |        |         |        |        |       | PROJECTED |       |       |       |       |     |
|---|---------|--------|--------|--------|---------|--------|--------|-------|-----------|-------|-------|-------|-------|-----|
|   | CY 1966 |        |        |        | CY 1967 |        |        |       | May       | Jun   | Jul   | Aug   | Sep   | Oct |
|   | Oct b/  | Nov b/ | Dec b/ | Jan b/ | Feb b/  | Mar b/ | Apr b/ |       |           |       |       |       |       |     |
| <b>Attack Sorties</b>                       |         |        |        |        |         |        |        |       |           |       |       |       |       |     |
| USN/USMC                                    | 6840    | 7132   | 7347   | 8247   | 8912    | 10070  | 10309  | 9151  | 9221      | 9192  | 9186  | 9191  | 9282  |     |
| USAF-TAC                                    | 13594   | 13562  | 14769  | 15616  | 14713   | 17528  | 17103  | 15306 | 15306     | 15460 | 16402 | 16402 | 16395 |     |
| B-52  | 408     | 531    | 659    | 735    | 706     | 816    | 823    | 800   | 800       | 800   | 800   | 800   | 800   |     |
| <b>Tons Per Sortie</b>                      |         |        |        |        |         |        |        |       |           |       |       |       |       |     |
| USN/USMC                                    | 1.59    | 1.58   | 1.81   | 1.99   | 1.95    | 1.77   | 1.83   | 1.95  | 1.95      | 1.95  | 1.95  | 1.95  | 1.95  |     |
| USAF-TAC                                    | 1.40    | 1.54   | 1.60   | 1.71   | 1.77    | 1.81   | 1.83   | 1.90  | 1.95      | 2.00  | 2.00  | 2.00  | 2.00  |     |
| B-52  | 20.8    | 20.0   | 20.6   | 20.7   | 28.0    | 27.1   | 25.5   | 28.0  | 30.0      | 30.0  | 30.0  | 30.0  | 30.0  |     |
| <b>Tons</b>                                 |         |        |        |        |         |        |        |       |           |       |       |       |       |     |
| USN/USMC                                    | 10.9    | 11.3   | 13.3   | 16.4   | 17.4    | 17.8   | 18.9   | 17.8  | 18.0      | 17.9  | 17.9  | 17.9  | 18.0  |     |
| USAF-TAC                                    | 19.0    | 20.9   | 23.7   | 26.7   | 26.0    | 31.8   | 30.9   | 31.2  | 29.8      | 30.9  | 32.8  | 32.8  | 32.8  |     |
| B-52  | 8.5     | 10.6   | 13.6   | 15.2   | 19.8    | 22.1   | 21.0   | 22.4  | 24.0      | 24.0  | 24.0  | 24.0  | 24.0  |     |
| MAP   | 3.0     | 4.1    | 4.0    | 3.6    | 3.8     | 4.0    | 4.0    | 4.2   | 4.2       | 4.2   | 4.2   | 4.2   | 4.2   |     |
| Army  | 1.1     | 1.0    | 1.2    | 1.2    | 1.2     | 1.7    | 1.9    | 1.9   | 1.9       | 1.9   | 1.9   | 1.9   | 1.9   |     |
| <b>Total</b>                                | 42.5    | 47.9   | 55.8   | 63.1   | 68.2    | 77.4   | 76.7   | 77.5  | 78.9      | 80.8  | 80.8  | 80.8  | 81.0  |     |
| <b>Worldwide Inventory (Thous. of Tons)</b> |         |        |        |        |         |        |        |       |           |       |       |       |       |     |
| Start Month                                 | 410.0   | 441.9  | 471.7  | 500.1  | 528.9   | 550.6  | 569.6  | 584.9 | 600.9     | 614.9 | 629.2 | 639.4 | 648.8 |     |
| -Cons*                                      | 45.3    | 49.1   | 57.5   | 64.4   | 69.9    | 78.9   | 79.7   | 80.5  | 80.9      | 81.9  | 83.8  | 83.8  | 84.0  |     |
| +Prod                                       | 77.2    | 78.9   | 85.9   | 93.2   | 91.6    | 97.9   | 95.0   | 99.1  | 94.9      | 96.2  | 94.0  | 93.2  | 92.0  |     |
| End Month                                   | 441.9   | 471.7  | 500.1  | 528.9  | 550.6   | 569.6  | 584.9  | 600.9 | 614.9     | 629.2 | 639.4 | 648.8 | 657.0 |     |

500/750 #GP Bomb Stocks vs. Consumption Rates in SEA

|                            | October | November | December | January | February | March | April |
|----------------------------|---------|----------|----------|---------|----------|-------|-------|
| <b>USN/USMC</b>            |         |          |          |         |          |       |       |
| Stocks (tons)              | 13.0    | 13.8     | 21.4     | 19.2    | 18.6     | 23.6  | 26.9  |
| Monthly Cons Rate (tons)   | 5.4     | 6.4      | 7.7      | 10.8    | 11.6     | 11.0  | 12.7  |
| Ratio (Days) <sup>c/</sup> | 72.2    | 64.7     | 83.4     | 53.3    | 48.1     | 64.4  | 63.5  |
| <b>USAF-Tac</b>            |         |          |          |         |          |       |       |
| Stocks (tons)              | 11.4    | 13.0     | 20.0     | 24.5    | 36.7     | 35.1  | 27.4  |
| Monthly Cons Rate (tons)   | 8.8     | 11.4     | 15.0     | 17.9    | 17.6     | 22.1  | 21.3  |
| Ratio (Days)               | 38.9    | 34.2     | 40.0     | 41.1    | 63.6     | 47.6  | 38.6  |

2.75 in Motors vs. Consumption Rates in SEA

|                               | October | November | December | January | February | March | April |
|-------------------------------|---------|----------|----------|---------|----------|-------|-------|
| <b>Army</b>                   |         |          |          |         |          |       |       |
| Stocks (items 000)            | 251.6   | 324.8    | 318.8    | 284.2   | 416.6    | 575.3 | 680.9 |
| Monthly Cons Rate (items 000) | 84.1    | 84.5     | 100.7    | 101.4   | 103.5    | 126.2 | 158.8 |
| Ratio (Days) <sup>c/</sup>    | 89.8    | 121.7    | 95.0     | 84.1    | 120.8    | 156.9 | 128.6 |

<sup>a/</sup> Sorties are those of Program #4. Tons per sortie for USN/USMC aircraft are slightly higher than the 1.85 level experienced last three months. The Air Force tactical aircraft tons per sortie assume a gradual return to the two ton level experienced CY 1965 and during January 1966. Analysis of general purpose bomb stocks available in SEA for tactical aircraft supports the loads.

<sup>b/</sup> Actual data thru 30 April.

<sup>c/</sup> Based on 30 day month.

\* Includes 3000 tons per month training expenditures projected for April and subsequent months. Actual figures are Worldwide

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| ACTUAL  |        | PROJECTED |       |       |       |       |       |       |       |
|---------|--------|-----------|-------|-------|-------|-------|-------|-------|-------|
| CY 1967 |        |           |       |       |       |       |       |       |       |
| Mar b/  | Apr b/ | May       | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 10070   | 10309  | 9151      | 9221  | 9192  | 9186  | 9191  | 9282  | 9403  | 9165  |
| 17528   | 17103  | 15306     | 15306 | 15460 | 16402 | 16402 | 16395 | 16395 | 16395 |
| 816     | 823    | 800       | 800   | 800,  | 800   | 800   | 800   | 800   | 800   |
| 1.77    | 1.83   | 1.95      | 1.95  | 1.95  | 1.95  | 1.95  | 1.95  | 1.95  | 1.95  |
| 1.81    | 1.83   | 1.90      | 1.95  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| 27.1    | 25.5   | 28.0      | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| 17.8    | 18.9   | 17.8      | 18.0  | 17.9  | 17.9  | 17.9  | 18.1  | 18.3  | 17.9  |
| 31.8    | 30.9   | 31.2      | 29.8  | 30.9  | 32.8  | 32.8  | 32.8  | 32.8  | 32.8  |
| 22.1    | 21.0   | 22.4      | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  |
| 4.0     | 4.0    | 4.2       | 4.2   | 4.2   | 4.2   | 4.2   | 4.2   | 4.2   | 4.2   |
| 1.7     | 1.9    | 1.9       | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| 77.4    | 76.7   | 77.5      | 78.9  | 80.8  | 80.8  | 80.8  | 81.0  | 81.2  | 80.8  |
| 550.6   | 569.6  | 584.9     | 600.9 | 614.9 | 629.2 | 639.4 | 648.8 | 657.4 | 666.0 |
| 78.9    | 79.7   | 80.5      | 80.9  | 81.9  | 83.8  | 83.8  | 84.0  | 84.2  | 83.8  |
| 97.9    | 95.0   | 99.1      | 94.9  | 96.2  | 94.0  | 93.2  | 92.6  | 92.8  | 93.1  |
| 569.6   | 584.9  | 600.9     | 614.9 | 629.2 | 639.4 | 648.8 | 657.4 | 666.0 | 675.3 |

Bomb Stocks vs. Consumption Rates in SEA

| November | December | January | February | March | April |
|----------|----------|---------|----------|-------|-------|
| 13.8     | 21.4     | 19.2    | 18.6     | 23.6  | 26.9  |
| 6.4      | 7.7      | 10.8    | 11.6     | 11.0  | 12.7  |
| 64.7     | 83.4     | 53.3    | 48.1     | 64.4  | 63.5  |
| 13.0     | 20.0     | 24.5    | 36.7     | 35.1  | 27.4  |
| 11.4     | 15.0     | 17.9    | 17.6     | 22.1  | 21.3  |
| 34.2     | 40.0     | 41.1    | 63.6     | 47.6  | 38.6  |

Engines vs. Consumption Rates in SEA

| November | December | January | February | March | April |
|----------|----------|---------|----------|-------|-------|
| 324.8    | 318.8    | 284.2   | 416.6    | 575.3 | 680.9 |
| 84.5     | 100.7    | 101.4   | 103.5    | 126.1 | 158.8 |
| 121.7    | 95.0     | 84.1    | 120.8    | 136.9 | 128.6 |

For USN/USMC aircraft are slightly higher than the 1.85 level experienced during the tons per sortie assume a gradual return to the two ton level experienced during normal purpose bomb stocks available in SEA for tactical aircraft supports the above average

projected for April and subsequent months. Actual figures are Worldwide consumption.

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## OCEAN CARGO SHIPMENTS FROM CONUS TO SEA

The attached table summarizes the ocean cargo lift from CONUS to SEA for the period August, 1965 to April, 1967, and presents the OASD(I&L) forecast of shipments through December, 1967.

Total shipments from CONUS to SEA in April remained at the same high level as in March. However, shipments to SVN increased by 10% to establish an all-time high of 876,000 M/T. Within the SVN total, increases occurred in the ammunition and "other" categories. <sup>1/</sup> In view of the steady growth in the "other" category and other indicators, it appears that excessive stocks of material may be building-up in SVN.

Total shipments to the non-SVN ports in SEA totaled 409,000 M/T which was a 84,000 M/T reduction from the March level. Detailed information as to the distribution among the ports is not yet available; however, preliminary information indicates the majority of the reduction may have occurred in shipments to Okinawa. If the final data confirms this, it will be a significant reversal of the March, 1967 experience commented on in last month's Southeast Asia Analysis Report (pp. 47).

In view of the Secretary of Defense decision in December, 1966 to restrict the role of Okinawa in the Army's PACOM logistic system, continued reductions in the tonnage shipped to Okinawa for the 2nd Logistic Command depot should be expected. Information available indicates the following requisition cancellation request actions by the 2nd Logistic Command.

| <u>Date of Cancellation Request</u> | <u>No of Line Items</u> | <u>\$ Value</u>   |
|-------------------------------------|-------------------------|-------------------|
| March 8, 1967                       | 70,000                  | 192,700,000       |
| March 30, 1967                      | 4,600                   | 11,600,000        |
| March 31, 1967                      | <u>17,000</u>           | <u>34,000,000</u> |
|                                     | 91,600                  | 238,300,000       |

If a significant portion of these cancellation requests are acted upon before shipment from CONUS, major savings in packing, in-land transportation, ocean shipping and replacement procurement costs should result.

<sup>1/</sup> "Other" includes all material except unit equipment, ammunition and aircraft.

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MSTS OCEAN CARGO SHIPMENTS FROM CONUS TO SEA <sup>a/</sup>  
(000 M/T)

| MONTH | ALL SOUTH VIETNAM PORTS |      |          |       |       | Jan '67<br>Forecast | ALL OTHER SEA DESTINATIONS |                     | G<br>Act |
|-------|-------------------------|------|----------|-------|-------|---------------------|----------------------------|---------------------|----------|
|       | Unit Equip              | Ammo | Aircraft | Other | Total |                     | Total                      | Jan '67<br>Forecast |          |
| 1965  |                         |      |          |       |       |                     |                            |                     |          |
| Aug   | 211                     | 23   | 83       | 171   | 488   |                     | 128                        |                     | 61       |
| Sep   | 130                     | 44   | 4        | 229   | 407   |                     | 163                        |                     | 57       |
| Oct   | 129                     | 108  | 24       | 248   | 509   |                     | 243                        |                     | 75       |
| Nov   | 47                      | 50   | 47       | 209   | 353   |                     | 316                        |                     | 66       |
| Dec   | 28                      | 13   | 13       | 230   | 284   |                     | 308                        |                     | 59       |
| 1966  |                         |      |          |       |       |                     |                            |                     |          |
| Jan   | 19                      | 51   | 16       | 260   | 346   |                     | 284                        |                     | 63       |
| Feb   | 21                      | 35   | 10       | 402   | 468   |                     | 262                        |                     | 73       |
| Mar   | 28                      | 86   | 25       | 376   | 515   |                     | 339                        |                     | 85       |
| Apr   | 7                       | 76   | 6        | 424   | 513   |                     | 352                        |                     | 86       |
| May   | 57                      | 46   | 20       | 398   | 521   |                     | 363                        |                     | 88       |
| June  | 43                      | 92   | 21       | 404   | 560   |                     | 347                        |                     | 90       |
| July  | 87                      | 84   | 42       | 419   | 632   |                     | 393                        |                     | 102      |
| Aug   | 115                     | 88   | 14       | 476   | 693   |                     | 520                        |                     | 121      |
| Sep   | 210                     | 83   | 17       | 412   | 722   |                     | 439                        |                     | 116      |
| Oct   | 139                     | 90   | 18       | 518   | 765   |                     | 485                        |                     | 125      |
| Nov   | 120                     | 94   | 2        | 491   | 707   |                     | 416                        |                     | 112      |
| Dec   | 94                      | 125  | 8        | 514   | 741   |                     | 362                        |                     | 110      |
| 1967  |                         |      |          |       |       |                     |                            |                     |          |
| Jan   | 67                      | 93   | 29       | 570   | 759   | 745                 | 382                        | 374                 | 114      |
| Feb   | 78                      | 93   | 10       | 595   | 776   | 753                 | 384                        | 376                 | 116      |
| Mar   | 91                      | 68   | 25       | 613   | 797   | 763                 | 493                        | 380                 | 128      |
| Apr   | 86                      | 113  | 16       | 661   | 876   | 770                 | 409                        | 375                 | 128      |
| May   |                         |      |          |       |       | 784                 |                            | 375                 |          |
| June  |                         |      |          |       |       | 796                 |                            | 375                 |          |
| July  |                         |      |          |       |       | 810                 |                            | 381                 |          |
| Aug   |                         |      |          |       |       | 825                 |                            | 377                 |          |
| Sep   |                         |      |          |       |       | 835                 |                            | 377                 |          |
| Oct   |                         |      |          |       |       | 853                 |                            | 376                 |          |
| Nov   |                         |      |          |       |       | 850                 |                            | 376                 |          |
| Dec   |                         |      |          |       |       | 870                 |                            | 376                 |          |

a/ SEA defined to include all ports west of Hawaii. Actual data from MIMTS adjusted to include Air Force Special SASM. Forecast data from OASD(I&L).

DOWNGRADED AT 5 YEAR INTERVALS;  
DECLASSIFIED EVERY 10 YEARS.  
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TO SEA <sup>a/</sup>

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|              |                             | <u>ALL OTHER SEA DESTINATIONS</u> |                             | <u>GRAND TOTAL SEA</u> |                             | <u>UNBOOKED CARGO CONUS<br/>TO ALL SEA DESTINATIONS</u> |
|--------------|-----------------------------|-----------------------------------|-----------------------------|------------------------|-----------------------------|---|
| <u>Total</u> | <u>Jan '67<br/>Forecast</u> | <u>Total</u>                      | <u>Jan '67<br/>Forecast</u> | <u>Actual</u>          | <u>Jan '67<br/>Forecast</u> |   |
| 488          |                             | 128                               |                             | 616                    |                             |   |
| 407          |                             | 163                               |                             | 570                    |                             |   |
| 509          |                             | 243                               |                             | 752                    |                             |   |
| 353          |                             | 316                               |                             | 669                    |                             |   |
| 284          |                             | 308                               |                             | 592                    |                             |   |
| 346          |                             | 284                               |                             | 630                    |                             | 16  |
| 468          |                             | 262                               |                             | 730                    |                             | 45  |
| 515          |                             | 339                               |                             | 854                    |                             | 16  |
| 513          |                             | 352                               |                             | 865                    |                             | 84  |
| 521          |                             | 363                               |                             | 884                    |                             | 235   |
| 560          |                             | 347                               |                             | 907                    |                             | 213   |
| 632          |                             | 393                               |                             | 1025                   |                             | 234   |
| 693          |                             | 520                               |                             | 1213                   |                             | 298   |
| 722          |                             | 439                               |                             | 1161                   |                             | 162   |
| 765          |                             | 485                               |                             | 1250                   |                             | 66  |
| 707          |                             | 416                               |                             | 1123                   |                             | 63  |
| 741          |                             | 362                               |                             | 1103                   |                             | 87  |
| 759          | 745                         | 382                               | 374                         | 1141                   | 1119                        | 133   |
| 776          | 753                         | 384                               | 376                         | 1160                   | 1129                        | 23  |
| 797          | 763                         | 493                               | 380                         | 1289                   | 1143                        | 29  |
| 876          | 770                         | 409                               | 375                         | 1285                   | 1145                        | 22  |
|              | 784                         |                                   | 375                         |                        | 1159                        |   |
|              | 796                         |                                   | 375                         |                        | 1171                        |   |
|              | 810                         |                                   | 381                         |                        | 1191                        |   |
|              | 825                         |                                   | 377                         |                        | 1202                        |   |
|              | 835                         |                                   | 377                         |                        | 1212                        |   |
|              | 853                         |                                   | 376                         |                        | 1229                        |   |
|              | 850                         |                                   | 376                         |                        | 1226                        |   |
|              | 870                         |                                   | 376                         |                        | 1246                        |   |

Actual data from MIMTS adjusted to include Air Force Special Express ammo shipments data furnished by

OASD/SA/SEA Programs Div.  
May 15, 1967

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## AIR CARGO SHIPMENTS TO SOUTHEAST ASIA

The following table illustrates the sharp increase in air cargo shipments from CONUS to Southeast Asia.

### Air Cargo Shipments from CONUS to SVN and Other Southeast Asia 1/ (Short Tons)

| <u>Qtr</u>    | <u>Monthly Average</u> |                  |                  |
|---------------|------------------------|------------------|------------------|
|               | <u>SVN</u>             | <u>Other SEA</u> | <u>Total SEA</u> |
| Oct-Dec, 1965 | 4,200                  | 5,500            | 9,700            |
| Jan-Mar, 1966 | 5,600                  | 6,000            | 11,600           |
| Apr-Jun, 1966 | 8,100                  | 6,600            | 14,700           |
| Jul-Sep, 1966 | 10,400                 | 7,300            | 17,700           |
| Oct-Dec, 1966 | 14,600                 | 8,700            | 23,300           |
| Jan-Mar, 1967 | 17,300                 | 10,600           | 27,900           |

1/ Data source: OASD(I&L). Other SEA defined to include Thailand, Philippines, Taiwan, Okinawa, Japan and Guam.

ASD(I&L) recently instituted a mandatory pre-shipping challenge procedure for all shipments of certain commodities exceeding 1,000 pounds. This action resulted from the continued growth of air shipments to Southeast Asia, an OSD sample of air export cargo which indicated questionable priority assignments, and expenditures for commercial augmentation of MAC reaching the rate of \$600 million a year. The commodity groups placed under the mandatory procedure include:

- (a) construction materials
- (b) fuels, lubricants and gas generators
- (c) printed forms
- (d) clothing
- (e) rations
- (f) office supplies

Under the procedure, detailed lists will be submitted to ASD(I&L) and the Services each month identifying all shipments made by air after challenge because of reaffirmation of the requirement for air shipment.

In a parallel action, ASD(I&L) also directed an embargo on low priority shipments in the ocean cargo system called Sea Express (SEA-EX). This will restore the SEA-EX system to its intended use of providing expedited ocean transportation for high priority cargo. The effect of the two sets of actions should be significantly reduced air and Sea Express shipments and costs.

As a direct result of the ASD(I&L) actions, CINCPAC has instituted similar procedures for intra-PACOM air and expedited ocean shipments. CINCPAC also reemphasized that control must be exercised on requisitions to prevent abuses of the priority system.

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## SAIGON PORT

As the table and attached charts indicate, the AID/Commercial cargo sector of the Saigon port is in its best condition in a year. Despite the highest rate of cargo arrivals in the port since October, 1966, the April discharge of 296,000 short tons resulted in the lowest end-of-month backlog of undischarged cargo experienced to date. The backlog on April 30, 1967 was equal to only 1 week's work.

### SAIGON PORT COMMERCIAL/AID CARGO INPUT - OUTPUT ANALYSIS (000 Short Tons)

|      | <u>Month</u> | <u>Beginning Backlog</u> | <u>Arrivals during month 1/</u> | <u>Total Avail. Cargo</u> | <u>Discharged</u> | <u>Ending Backlog</u> |
|------|--------------|--------------------------|---------------------------------|---------------------------|-------------------|-----------------------|
| 1966 | May*         | 101                      | 164                             | 265                       | 179               | 86                    |
|      | Jun          | 86                       | 235                             | 321                       | 198               | 123                   |
|      | Jul          | 123                      | 293                             | 416                       | 235               | 181                   |
|      | Aug          | 181                      | 264                             | 445                       | 249               | 196                   |
|      | Sep          | 196                      | 157                             | 353                       | 191               | 162                   |
|      | Oct          | 162                      | 275                             | 437                       | 215               | 222                   |
|      | Nov          | 222                      | 231                             | 453                       | 244               | 209                   |
|      | Dec          | 209                      | 204                             | 413                       | 102               | 311                   |
| 1967 | Jan          | 311                      | 220                             | 531                       | 267               | 264                   |
|      | Feb          | 264                      | 106                             | 370                       | 199               | 171                   |
|      | Mar          | 171                      | 211                             | 382                       | 284               | 98                    |
|      | Apr          | 98                       | 260                             | 358                       | 296               | 62                    |

1/ Arrivals are computed rather than reported.

\* No backlog data available prior April, 1966.

The over-all progress in the port is due to the cumulative effects of improvements in facilities, equipment and management; however, as the following table indicates, U.S. military cargo handling has made a major contribution. While GVN discharge rates have remained relatively constant (excluding the low performance in December, 1966 due to the strike and February, 1967 due to TET), the U.S. military is handling about one-third of the cargo discharged (in addition to 200,000 S/T a month of U.S. military cargo).

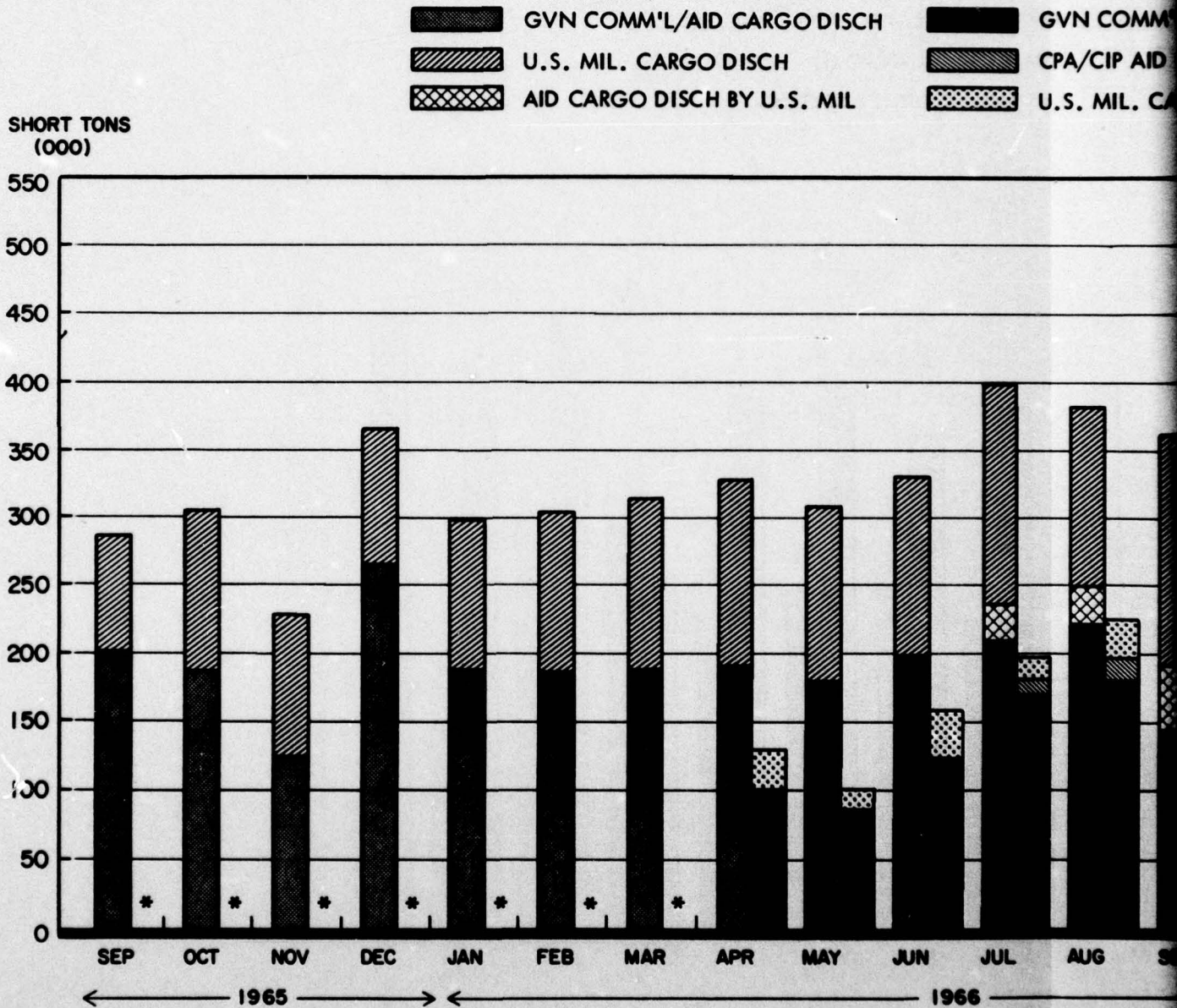
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## SAIGON PORT COMMERCIAL/AID CARGO DISCHARGED BY GVN AND U.S. MILITARY (000 Short Tons)

|      | <u>Month</u> | <u>Discharged<br/>by GVN</u> | <u>Discharged<br/>by U.S. Mil</u> | <u>Total<br/>Discharged</u> | <u>% Discharged<br/>by U. S. Mil</u> |
|------|--------------|------------------------------|-----------------------------------|-----------------------------|--------------------------------------|
| 1966 | Jul*         | 210                          | 25                                | 235                         | 11                                   |
|      | Aug          | 222                          | 27                                | 249                         | 11                                   |
|      | Sep          | 143                          | 48                                | 191                         | 25                                   |
|      | Oct          | 164                          | 51                                | 215                         | 24                                   |
|      | Nov          | 191                          | 53                                | 244                         | 22                                   |
|      | Dec          | 66                           | 36                                | 102                         | 35                                   |
| 1967 | Jan          | 194                          | 73                                | 267                         | 27                                   |
|      | Feb          | 134                          | 65                                | 199                         | 33                                   |
|      | Mar          | 189                          | 95                                | 284                         | 34                                   |
|      | Apr          | 204                          | 92                                | 296                         | 31                                   |

\* U.S. military began discharging AID cargo in July, 1966.

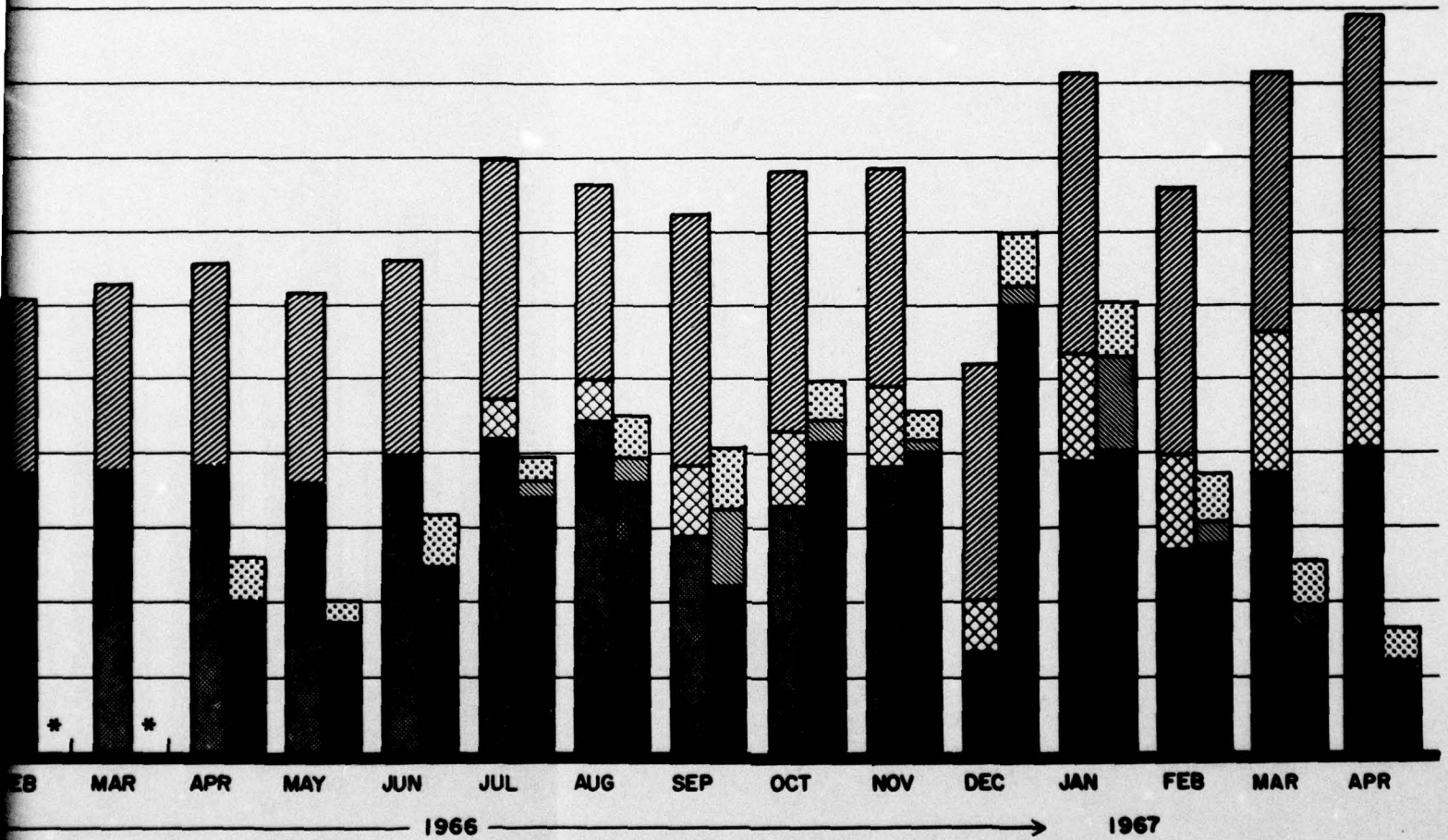
# SAIGON PORT CARGO DISCHARGED AND BACKLOG



\* GVN BACKLOG FIGURES NOT AVAILABLE

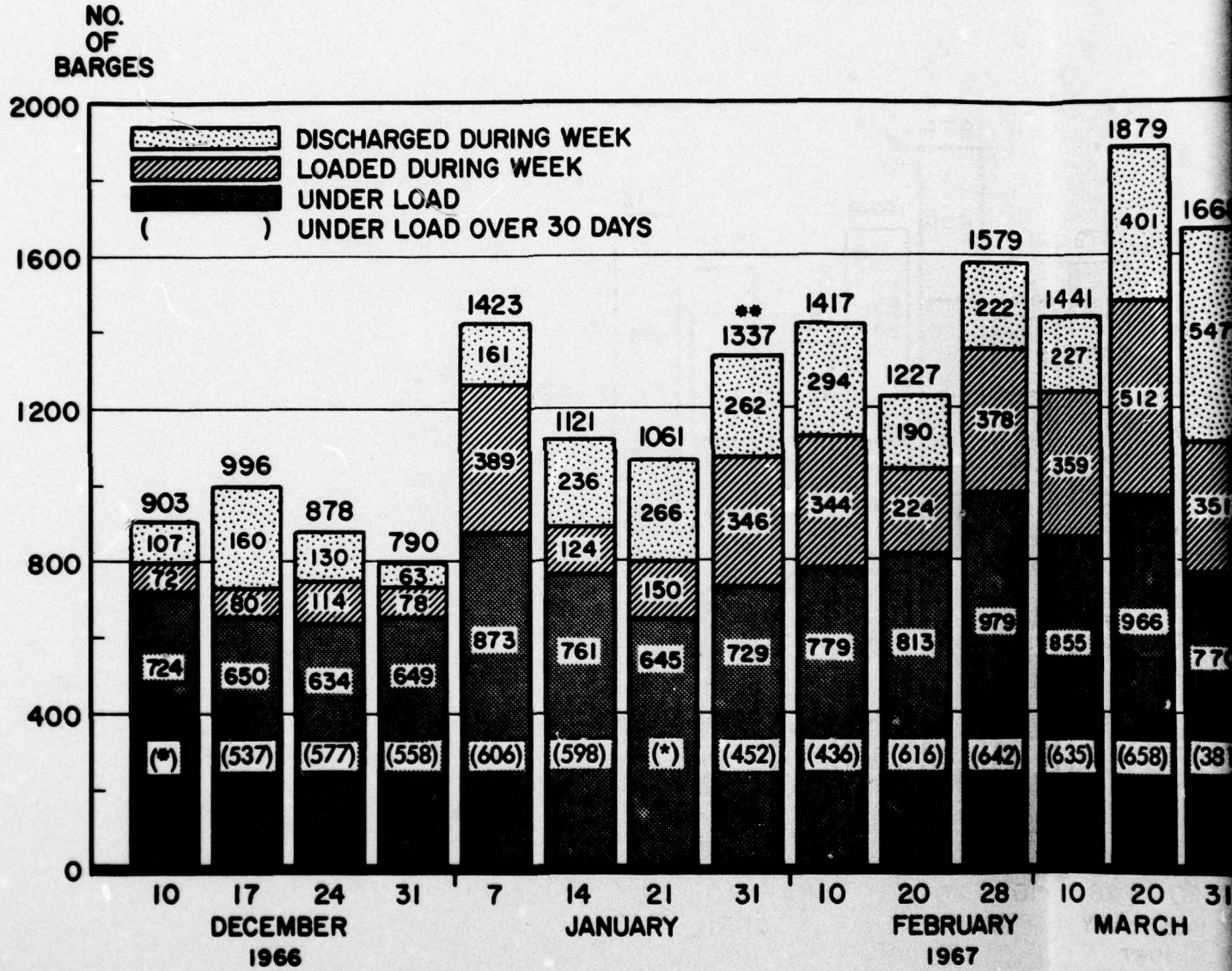
# ED AND BACKLOG

IN COMM'L/AID CARGO DISCH      ■ GVN COMM'L/AID CARGO BACKLOG  
 S. MIL. CARGO DISCH            ▨ CPA/CIP AID CARGO U.S. MIL BACKLOG  
 CARGO DISCH BY U.S. MIL      ▩ U.S. MIL. CARGO BACKLOG



FIGURES NOT AVAILABLE

# SAIGON BARGE REPORT (COMMERCIAL ONLY)



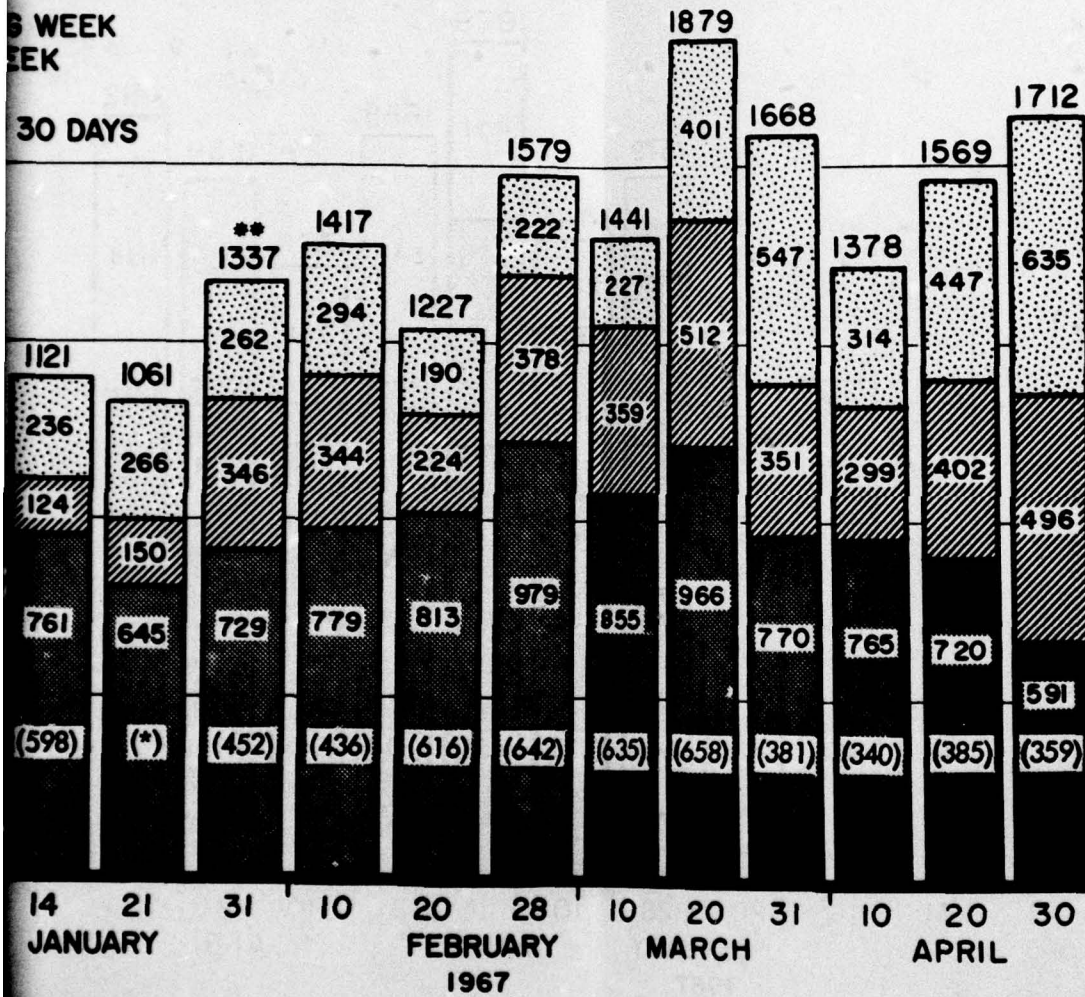
(\*) DATA NOT AVAILABLE

(\*\*) REPORTING PERIOD CHANGED TO 10 DAY PERIODS

# E REPORT (ONLY)

WEEK  
WEEK

30 DAYS



TO 10 DAY PERIODS

49

2

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CONSTRUCTION PROGRAM SUMMARY AND PROGRESS

The following table summarizes the status of SEA MILCON funding, estimated cost, and work completed as of March 30, 1967.

| (\$000)      | FUNDING             |                     |              | FY 1966S AND PRIOR PROJECTS   |                         |                   |                 |
|--------------|---------------------|---------------------|--------------|-------------------------------|-------------------------|-------------------|-----------------|
|              | FY 1966S<br>& Prior | FY 1967S<br>FY 1968 | TOTAL        | Funds<br>Released<br>to Field | Current<br>Working Est. | \$<br>Completion  | %<br>Completion |
| SVN          | 1,089               | 474                 | 1,563        | 1,088 <sup>b/</sup>           | 1,356 <sup>b/</sup>     | 731 <sup>b/</sup> | 54              |
| Other        | 639                 | 464 <sup>a/</sup>   | 1,103        | 584 <sup>c/</sup>             | 591 <sup>c/</sup>       | 329 <sup>c/</sup> | 55              |
| <b>TOTAL</b> | <b>1,728</b>        | <b>938</b>          | <b>2,666</b> | <b>1,672</b>                  | <b>1,947</b>            | <b>1,060</b>      | <b>54</b>       |

a/ Includes \$200 million DOD worldwide Contingency Fund.

b/ Re: 1 April 1967 NAVFAC Construction Status Report, Vietnam, plus TURNKEY.

c/ Re: March 1967 DD-6610 Reports.

During March contractor (RMK-BRJ) and troop work-in-place in SVN fell about 21% short of their planned output (\$85 million vs. \$107 million).

The apparent cost overrun (excess of planned scope cost over available funds) for SVN construction dropped by about \$4 million during March. The table above shows that the current cost estimate for projects started exceeds the released funds by \$268 million. When the \$126 in FY 1967S overrun funds are applied to the current estimate of underfunding, there is still a deficit of \$142 million.

The Level of Effort (LOE) system for control of contractor construction in SVN discussed in the April SEA Analysis Report was started on April 1. Under this concept the total contractor effort will be sized to live within funds available. In addition, a site-by-site reappraisal of construction plans is being conducted by MACV to make appropriate scope adjustments and assign the remaining work to the contractor or troop units. The LOE concept is designed to get the maximum construction from the available construction dollars.

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