Compatibility of cruise speed between C-123/T-28/A-26 makes this combination extremely attractive. Procedures for coordinating flare drops over observed target checked satisfactorily over range in Thailand. Further evaluation in STEEL TIGER could be undertaken to refine techniques and procedures."

Other observations concerning the C-123 included:

- A safety line should be used on the individual operating the scope.
- Blackout curtains should be used on the cargo compartment windows.
- Armor plating should be used under the stored flares.
- An absolute must was to have the aircraft underside painted flat black.
- The mount platform was extremely stable and drop accuracy was as expected.

Subsequently, a plan was developed whereby the C-123 aircraft and the T-28D aircraft would form a "Hunter-Killer" team over Laos at night. The use of the Starlight Scope was the key factor in this team effort, and could be exploited for complete surprise by utilizing a "one run and drop flare maneuver" by the C-123. This plan was submitted to 7AF, which not only approved the plan, but directed that the A-26A operation would also be combined with the C-123 in the BARREL ROLL area.

Combat Operations Epilogue

This study pertained only to operations through 8 March 1967—one year from the date of Lucky Tiger activation at Nakhon Phanom. Additional data on COIN operations in Thailand and combat operations in Laos may be
found in special CRECO studies on air operations from Thailand. Historical coverage of Lucky Tiger operations will be provided on a continuing basis.

By 8 March 1967, the T-28Ds and A-26As of the 606th ACS operating in the STEEL TIGER and BARREL ROLL areas of Laos, and to a limited degree in North Vietnam, had thus far made an impressive contribution to the night interdiction program. New concepts for more effective application of 606th ACS resources in the night interdiction program were constantly being developed.

Statistics as of 2 March showed that the 606th ACS had ten T-28s and ten A-26As on hand. From July 1966 to 28 February 1967, the A-26As had flown 2,004 sorties, with 62 weather cancellations and 174 maintenance cancellations. The sortie rate was 1.0 and the total time flown was 4,968 hours. Results as previously stated were spectacular. By 28 February, the A-26s had destroyed 275 trucks and damaged 246 more. They had also hit 1,223 truck parks resulting in 1,033 secondary explosions. Other results included 602 road cuts, 24 gun positions, 148 structures, 823 bivouac areas hit, 492 KBA. There were also 23 gun positions, 27 boats and 79 structures damaged. Twenty-five A-26s had received battle damage, and three had been lost to combat. One loss by accident was recorded.

In operation less than two months, the T-28 night strike force has also been productive. The T-28s had flown 455 sorties, with no aborts recorded. Total flying time from 9 January to 2 March 1967, was 1,066 hours. Forty-two trucks had been destroyed and 68 damaged. Other results included 32 road
cuts, 7 gun positions destroyed and 5 damaged, 15 KBA, 65 secondary fires and
67 secondary explosions, 1 bivouac area damaged, 1 structure destroyed, and
1 damaged. Three T-28s had received battle damage, and 1 aircraft was lost
to ground fire.

Certain factors contributing to the success of night operations by these
aircraft, i.e., flare capability, longer loiter time, proximity of Nakhon
Phanom to the interdiction areas, heavy night truck movement, etc., have
been discussed earlier in this study. What have not been discussed are the
motivation factor and the composite operational posture at Nakhon Phanom.

In March 1966, when operations at Nakhon Phanom began expanding, the
Director of Operations at 7AF/13AF Headquarters recognized the requirement
for a Tactical Unit Operations Center (TUOC) to support and coordinate the
varied activities. The TUOC would coordinate mission planning as well as
operations between airborne aircraft, TACC-Udorn, and USAIRA, Vientiane. He
also recognized the probability of a longer range requirement for a Direct
Air Support Center (DASC) at Nakhon Phanom to direct overall operations of
TASS, Air Commando, SAR forces, and Pony Express. By March 1967, the control
center was still a TUOC, but operations were still expanding.

CINCPACAF, in October 1966, directed that the TUOC would be controlled
by the senior tactical commander at Nakhon Phanom. Since the 606th ACS was
under operational control of 7AF, the TUOC was assigned to the 606th ACS
Commander. Once operations became accelerated during the latter part of
1966 and early 1967, this arrangement proved highly productive. The composite
force functioning under the TUOC included the 606th ACS resources, the
23d TASS O-1Fs, SAR forces and Pony Express. A central intelligence and operations capability within the TUOC tied these resources into a highly motivated entity.

One pilot, Major Williams, made some very pertinent observations concerning the advantages of the composite operations from Nakhon Phanom:

"With these operations centered at Nakhon Phanom, we are able to get real time intelligence. By that I mean intelligence that may be only two or three hours old when the first briefing is done. The O-1F Nails are out there all day long, and they are able to check on the area in respect to truck parks--tracks on the road, dust on the trees and that sort of thing. They are also able to give us real time assessment of the condition of the choke points whether they are open or whether they have been closed. When we are briefed at 4:30 in the afternoon, some of the Nails are still airborne and on their way back in. The information they have for us is very timely."

Major Williams also pointed out the advantage of obtaining a good assessment of the weapons situation in the target areas from the Nail VR flights. "They pick up quite a bit of automatic and 37-mm weapons fire, and they are able to pinpoint those for us," he said. The Road Watch Teams were also an important part of the composite picture. Major Williams commented on this:

"During the last couple of weeks or so, the road watch teams have really come into their own as far as we are concerned. We have had highly accurate advance information from them such as how many and what time enemy trucks pass a certain location on a given route. This of course gives us an extremely good indication of the flow of traffic on that particular route. They also locate troop concentrations and storage areas that we can hit. The Nimrod (A-26) with his good load of ordnance is more effective against these."
"With this combination of all of us being on one base and all working in the area, everything jells together. Our intelligence from all of these sources are brought together here in a central shop, so Nimrods or Zorros (T-28s) attending these briefings get important information gleaned from all of these sources. This allows us to make a firm decision on the best or most lucrative areas to cover on a particular mission."

All officers functioning within the composite force under the TUOC daily worked together on developing a more effective operations. Individual experiences were brought out for discussion and compared, and individual ideas for improvement were always considered. New and corrective actions were generated with little or no delay. Pilots, navigators, maintenance and support officers, and intelligence personnel could see and appreciate the results of their team effort. All of this provided for a higher motivation factor, a better application of resources, and the visible results obtained from the compact team effort.

A structural change to the TUOC at Nakhon Phanom was directed in early March; however, the effect that it would have could not yet be determined. Headquarters, 7AF, advised on 5 March, that the increased activities in STEEL TIGER and the need for greater integration of effort between STEEL TIGER and TIGER HOUND generated a requirement for a more integrated organization. A STEEL TIGER Advon similar in character and function to the TIGER HOUND structure was developed by 7AF and sent to Nakhon Phanom to more or less direct 7AF operational control over all Nakhon Phanom based units. The 7AF Commander said: "The organization of this force will permit unit commanders at Nakhon Phanom to concentrate on their assigned mission rather than get their energies..."
diluted trying to cope with operational problems beyond their assigned mis-
sions."

On a final note, operations were being expanded as the period covered by this report drew to an end. Headquarters, 7AF, requested that if at all possible, the 606th ACS should generate two additional C-123 sorties and two additional T-28D sorties over Laos. The 23d TASS was also requested to increase its O-1F operations to eight sorties per night. The message advised: "Coming monsoon season dictates that we move fast to capitalize on advantages accruing from Starlight Scope operations."

A statement by the 606th ACS Commander to Lucky Tiger operations personnel on 4 March, reflected the spirit and intent with which Lucky Tiger operations were directed. He said:

"I cannot speak for the other commanders here at Nakhon Phanom, but I want it made clear that we are not going to just sit here at the base because the weather is bad out in the target areas. Our job here is to stop truck traffic—the movement of men and supplies, and if the weather here allows it, we go.

"Senior officers will be at the TUOC at night. We are involved in the war at night, and I want you here to work with the pilots, to direct operations and make decisions. We need every degree of control, and I want the pilots informed about every facet of their mission.

"Even in bad weather, we can work with the ABCCC, possibly divert to BARREL ROLL. We can harass the enemy with flares, even if we can't get down to strike. If the base is open, the mission is flown. I want this made very clear."
FOOTNOTES

CHAPTER I

/Documents as noted provided in one copy to AFCHO and in DTEC file copy.)

1. (S) Conclusion Drawn from Study of All Available Documents Re 606th
   ACS. (Hereafter cited: Study of Documents.)

2. (S) Operations Briefing, Hq 7AF/13AF, 2 Nov 66.


4. (S) Msg, Hq 7AF/13AF to 13AF, DCTDO 02894, subj: Transfer of Det 6,
   1st ACW, 2 Jun 66, Doc. 2.

5. (S) Ibid.

6. (S) Interview with Lt Col C. E. Ramsey, 7 Mar 67.

7. (S) Ibid; Ltr, ANEMB, USAIRA, to 7/13AF, subj: Personnel Support,
   25 Jan 67, Doc. 3.

8. (S) Ibid.

9. (S) Ibid.

10. (S) Ltr, DCR, 7AF/13AF to 7AF, subj: Butterfly FACs, 11 Mar 67,
   Doc. 4.

11. (S) Ibid.

12. (S) Interview with Lt Col C. E. Ramsey, 7 Mar 67.

13. (S) Ibid.

14. (S) Msg, CINCPACAF to AIG 592, DOCP 35791, subj: Forty-seven Quick
   Movement Directive, 7 Jun 66, Doc. 5; Ltr, DO to 7AF, subj: Concept

15. (S) Ibid.

16. (S) Ibid.

17. (S) Ibid.

18. (S) Ibid.
22. (S) Ibid.
27. (S) Ibid.
28. (S) Big Eagle Debriefing by Col D. A. Curto, 6 Sep 66.
30. (S) Ibid.
31. (S) Ibid.
32. (S) Ibid.
33. (S) Ibid.
35. (S) Ibid.
36. (S) Big Eagle Debriefing by Col D. A. Curto, 6 Sep 66.
37. (S) Msg, 7AF to CINCPACAF, DPL 73417, subj: AC-47 Aircraft, 5 Sep 66.
38. (S) Study—AC-47, by Project CHECO, Sep 66.
39. (S) Ibid.
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41. (S) Msg, CINCPACAF to 7AF, DO 31450, subj: AC-47 Deployment, 25 Sep 66.
42. (S) Msg, USAIRA Vientiane to CINCPACAF, subj: AC-47s at NKP, 15 Oct 66.
43. (S) Msg, AMEMB Vientiane to CINCPACAF, subj: A-26As, 15 Oct 66.
44. (S) Msg, 7AF to CINCPACAF, 73668, Oct 66, subj: Big Eagle, 2 Oct 66, Doc. 10.
45. (S) Msg, AMEMB Vientiane to CINCPAC, subj: A-26s, 15 Oct 66.
46. (S) Msg, CINCPAC to JCS, subj: A-26s vs. AC-47s, 22 Oct 66.
47. (C) Msg, CINCPAC to AMEMB Vientiane, Personal-Ambassador Sullivan fm Adm Sharp, Oct 66, Doc. 11.
51. (TS) Ibid.
52. (S) Intelligence Rpt, subj: Results of A-26 Air Strikes, 15 Nov 66, Doc. 13.
53. (S) Ibid.
55. (SNF) Intelligence Rpt, subj: Results of A-26 Air Strikes, 15 Nov 66, Doc. 13.
58. (S) Ibid.
59. (S) Ibid.
60. (S) Ibid.
61. (S) Study of Documents.
63. (TS) Summary, Hq PACAF DTE, Air Operations SEA, Vol XXIX, Nov 66;
(S) Study of Documents.

64. (TS/S) Ibid.

65. (TS/S) Ibid.

66. (TS/S) Ibid.

67. (TS/S) Ibid.

68. (SNF) Ltr, Cdr, 606 ACS to Cdr, 13AF, subj: Proposal to Improve USAF
Operations in SEA, 24 Dec 66, Doc. 15.

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71. (S) Ibid.

72. (S) Ibid.

73. (S) Ibid.

74. (TS) Summary, Hq PACAF DTE, Air Operations SEA, Vol XXX, Jan 67.
FOOTNOTES

CHAPTER II

1. (S) Ltr, 606 ACS Cdr to 13AF, subj: Proposal to Improve USAF Operations in SEA, 4 Jan 67, Doc. 16.

2. (S) Ibid.

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4. (S) Ibid.

5. (S) Ibid.

6. (S) Ibid.


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11. (TS) Msg, Cdr 606 ACS to DCR, 7AF/13AF, TS FASTEL 1023, subj: T-28 Aircraft, 6 Jan 67.

12. (TS) Msg, DCR, 7AF/13AF to 7AF, TS/LIMDIS/NOFORN DO 00023, subj: T-28 Aircraft, 6 Jan 67.


14. (S) Interview w/Col Harry C. Aderholt, Cdr, 606 ACS, 4 Mar 67. (Hereafter cited: Interview with Aderholt.)


17. (S) Ibid.


20. (S) Ibid.

21. (S) Ibid.

22. (S) Interview w/Maj David R. Williams, 606 ACS, 7 Mar 67. (Hereafter cited: Interview with Williams.)


24. (S) Study of Documents.


27. (S) Ibid.


29. (S) Memo, Hq 7AF/13AF, DO to DC, subj: AGM-12A Capability for Lucky Tiger T-28D Aircraft, 23 Feb 67, w/Ltr 606 ACS, 16 Feb 67, Doc. 21.

30. (S) Memo, Hq 7AF/13AF, DO to DC, subj: AGM-12A Capability for Lucky Tiger T-28D Aircraft, 23 Feb 67, w/Ltr 606 ACS, 16 Feb 67, Doc. 21.


32. (C) Ibid.

33. (C) 1st Ind to Capt J. J. Whipp's Ltr, by Cdr, 606 ACS, 21 Feb 67, Doc. 22.

34. (C) 2d Ind to Capt J. J. Whipp's Ltr, by Hq 7AF/13AF, N/D.

35. (S) Interview with Aderholt.

36. (S) Interview with Williams.

37. (S) Msg, 7AF to 634 TUOC, subj: Coordinated Night Operations, STEEL TIGER, 23 Feb 67.

41. (S) Ibid.

42. (S) Ibid.

43. (S) Ibid.

44. (C) Ltr, 606 ACS to DCR, 7AF/13AF, subj: Capability of C-123 Aircraft to Drop Flares for T-28 Aircraft, 21 Feb 67, Doc. 23.

45. (C) Ibid.

46. (S) Msg, 7AF to 7AF/13AF, 02073, Feb 67, subj: Flare Aircraft Support, 19 Feb 67, Doc. 24.

47. (S) Study of Documents.

48. (S) Briefing Charts, 606 ACS, 2 Mar 67.

49. (S) Ibid.

50. (S) Interview w/606 ACS Cdr and Key Officers, Mar 67.

51. (S) Study of Documents.

52. (S) Interview w/Williams.

53. (S) Interview with Adelheit.

54. (S) Interview with Aderholt.

55. (S) Msg, 634 TUOC to 7AF, subj: Night VR Ops, O-lF and T-28, 14 Feb 67.
## Glossary

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAA</td>
<td>Antiaircraft Artillery</td>
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<tr>
<td>ABCCC</td>
<td>Airborne Command Control Center</td>
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<td>ACS</td>
<td>Air Commando Squadron</td>
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<td>ACW</td>
<td>Air Commando Wing</td>
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<tr>
<td>ADC</td>
<td>Auto-Defense de Choc</td>
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<tr>
<td>AFAG</td>
<td>Air Force Advisory Group</td>
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<tr>
<td>AGE</td>
<td>Aerospace Ground Equipment</td>
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<td>AIRA</td>
<td>Air Attache</td>
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<td>AMEMB</td>
<td>American Embassy</td>
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<td>API</td>
<td>Armor Piercing Incendiary</td>
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<td>BDA</td>
<td>Bomb Damage Assessment</td>
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<td>BR</td>
<td>Barrel Roll</td>
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<td>CBU</td>
<td>Cluster Bomb Unit</td>
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<tr>
<td>CINCPACAF</td>
<td>Commander in Chief, Pacific Air Forces</td>
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<td>COMUSMACV</td>
<td>Commander, U.S. Military Assistance Command, Vietnam</td>
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<td>CSAF</td>
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<td>DASC</td>
<td>Direct Air Support Center</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<tr>
<td>FAC</td>
<td>Forward Air Controller</td>
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<td>FAR</td>
<td>Forces Armee Royale</td>
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<td>FM</td>
<td>Frequency Modulation</td>
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<tr>
<td>Frag</td>
<td>Fragmented Operations Order</td>
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<tr>
<td>GCI</td>
<td>Ground Controlled Intercept (Radar)</td>
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<tr>
<td>GP</td>
<td>General Purpose</td>
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<tr>
<td>IFF/SIF</td>
<td>Identification-Friend or Foe/Selective Identification Feature</td>
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<tr>
<td>IRAN</td>
<td>Inspection Repair As Necessary</td>
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<td>JUSMAG</td>
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<td>KBA</td>
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<td>LAU</td>
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<td>NVN</td>
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<td>POL</td>
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<td>Plasticized White Phosphorus</td>
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<td>Tactical Unit Operations Center</td>
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