SECRET

PHOTOGRAHIC INTERPRETATION REPORT

BLACk SHEILD
MISSION X-001

31 MAY 1967

NPIC/R-112/67
JUNE 1967

GROUP I EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION

SECRET

APPROVED FOR RELEASE 12958.3.3(b)(1)>25YRS
DATE: AUG 2007
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>2</td>
</tr>
<tr>
<td>TRACK OF MISSION</td>
<td>3</td>
</tr>
<tr>
<td>MISSILES</td>
<td>4</td>
</tr>
<tr>
<td>AIR FACILITIES</td>
<td>16</td>
</tr>
<tr>
<td>NAVAL ACTIVITY/PORTS</td>
<td>18</td>
</tr>
<tr>
<td>MILITARY ACTIVITY</td>
<td>19</td>
</tr>
<tr>
<td>COMPLEXES</td>
<td>21</td>
</tr>
</tbody>
</table>
THE FOLLOWING INFORMATION REPRESENTS A PRELIMINARY ANALYSIS OF MISSION BLACK SHIELD X001, 31 MAY 1967.

THE HEADER LINE FOR EACH TARGET, READING FROM LEFT TO RIGHT, CONTAINS THE TARGET NAME, COUNTRY CODE, GEOGRAPHIC COORDINATES, AND COMOR NUMBER.

PHOTO REFERENCE DATA INCLUDES FRAME NUMBERS, AND SYMBOLS DENOTING CONDITIONS, PHOTO INTERPRETABILTY, TARGET COVERAGE, AND THE MODE.

SYMBOLS USED TO INDICATE CONDITIONS WHICH AFFECT THE APPEARANCE OF THE TARGET ON PHOTOGRAPHY ARE AS FOLLOWS -- C (CLEAR), SC (SCATTERED CLOUD COVER), HC (HEAVY CLOUD COVER), H (HAZE), CS (CLOUD SHADOW), SD (SEMDARKNESS), GC (GROUND COVER), CF (CAMOUFLAGE), O (OBLIQUITY), AND GR (GROUND RESOLUTION).

INTERPRETABILTY OF THE PHOTOGRAPHY IS CATEGORIZED AS G (GOOD), F (FAIR), OR P (POOR). THE EXTENT OF TARGET COVERAGE IS DENOTED BY THE SYMBOLS T (TOTAL) OR PT (PARTIAL). THE MODE OF COVERAGE IS SIGNIFIED BY ST (STEREO), NS (NONSTEREO), OR PS (PARTIAL STEREO).
Missiles
MISSILES

LAO CAI SAM SEARCH
VN 2229N 10359E
NO SAM ACTIVITY OBSERVED.

DIEN BIEN PHU SAM SEARCH
VN 2123N 10301E
APPROXIMATELY 40 PERCENT OF THE SEARCH AREA COVERED BY 20 PERCENT CLOUD-FREE PHOTOGRAPHY. NO SAM INSTALLATIONS OBSERVED IN CLOUD-FREE AREAS.

HA NOI SAM SITE A10-2 (14)
VN 2101N 10558E
SITE CONSISTS OF AT LEAST 4 OCCUPIED REVETTED LAUNCH POSITIONS WITH POSSIBLE MISSILES, AND AN OCCUPIED REVETTED CENTRAL GUIDANCE AREA. OB -- 4 POSSIBLE SA-2 MISSILES AND A GUIDANCE RADAR.

HA NOI SAM SITE A19-2 (15)
VN 2055N 10550E
SITE CONSISTS OF AT LEAST 2 OCCUPIED REVETTED LAUNCH POSITIONS WITH POSSIBLE MISSILES. OB -- 2 POSSIBLE SA-2 MISSILES.

HA NOI SAM SITE A29-2 (4)
VN 2104N 10541E
SITE IS UNOCCUPIED.

HA NOI SAM SITE B12-2 (3)
VN 2056N 10604E
IDENTIFICATION ONLY.
HA NOI SAM SITE B29-2 (17)  VN  2104N 10539E

IDENTIFICATION ONLY.

HA NOI SAM SITE B30-2 (16)  VN  2106N 10539E

IDENTIFICATION ONLY.

HA NOI SAM SITE B17-2 (1)  VN  2047N 10554E

IDENTIFICATION ONLY.

HA NOI SAM SITE B21-2 (2)  VN  2051N 10545E

IDENTIFICATION ONLY.

HA NOI SAM SITE D31-2 (8)  VN  2121N 10522E

SITE IS UNOCCUPIED.

HA NOI SAM SITE A11-2 (9)  VN  2100N 10555E

SITE CONSISTS OF 4 OCCUPIED LAUNCH POSITIONS WITH POSSIBLE MISSILES, 1 POSSIBLY OCCUPIED POSITION, 1 UNOCCUPIED POSITION, AND AN OCCUPIED CENTRAL GUIDANCE AREA.

OB -- 4 POSSIBLE SA-2 MISSILES AND A GUIDANCE RADAR.
HA NOI SAM SITE D36-2 (39)  VN  2132N 10547E

SITE IS UNOCCUPIED.

HA NOI SAM SITE C06-2 (32)  VN  2119N 10615E

SITE CONSISTS OF 5 OCCUPIED, REVETTED LAUNCH POSITIONS (AT LEAST 3 WITH MISSILES), 1 UNOCCUPIED REVETTED LAUNCH POSITION, AND AN OCCUPIED UNREVETTED CENTRAL GUIDANCE AREA.

OB -- AT LEAST 3 SA-2 MISSILES AND A GUIDANCE RADAR.

HA NOI SAM SITE C07-2 (30)  VN  2116N 10619E

IDENTIFICATION ONLY.

HA NOI SAM SITE D318-2 (29)  VN  2123N 10520E

IDENTIFICATION ONLY.

HAI PHONG SAM SITE A29-2 (21)  VN  2052N 10634E

AT LEAST 4 POSITIONS UNOCCUPIED.

HAI PHONG SAM SITE A20-2 (25)  VN  2044N 10639E

SITE IS UNOCCUPIED.
HAI PHONG SAM SITE A29A-2 (37)  VN 2053N 10631E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE B33-2 (38)  VN 2107N 10630E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE B06-2 (47)  VN 2058N 10651E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE C32-2 (58)  VN 2106N 10623E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE C32A-2 (59)  VN 2106N 10622E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE B28-2 (60)  VN 2052N 10620E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE A07-2 (55)  VN 2055N 10650E
SITE IS UNOCCUPIED.
BLACK SHIELD X061, 31 MAY 1967

HAI PHONG SAM SITE A23-2 (66)  VN  2045N 10635E

SITE IS UNOCCUPIED.

HAI PHONG SAM SITE A33-2 (71)  VN  2056N 10636E

SITE IS UNOCCUPIED.

HAI PHONG SAM SITE C30-2 (72)  VN  2101N 10619E

AT LEAST 3 LAUNCH POSITIONS ARE UNOCCUPIED.

HAI PHONG SAM SITE C28-2 (73)  VN  2053N 10617E

SITE IS UNOCCUPIED.

HAI PHONG SAM SITE A02-2 (85)  VN  2056N 10642E

SITE IS UNOCCUPIED.

HAI PHONG SAM SUPPORT FACILITY  VN  2050N 10635E

FACILITY CONSISTS OF 1 DRIVE-THROUGH BUILDING, 5 DESTROYED/DISMANTLED BUILDINGS, AND 2 SUPPORT BUILDINGS. NO MISSILES OR MISSILE-RELATED ACTIVITY OBSERVED.

HAI PHONG SAM SITE A33A-2 (93)  VN  2054N 10638E

SITE CONSISTS OF 6 OCCUPIED LAUNCH POSITIONS AND AN OCCUPIED CENTRAL GUIDANCE AREA.
OB -- 6 SA-2 MISSILES AND GUIDANCE RADAR.

HAI PHONG SAM SITE D02-2 (69)  
IDENTIFICATION ONLY.  
VN 2025N 10601E

THANH HOA SAM SITE D03-2 (79)  
IDENTIFICATION ONLY.  
VN 2021N 10604E

THANH HOA SAM SITE D04A-2 (112)  
IDENTIFICATION ONLY.  
VN 2020N 10611E

HA NOI SAM SITE B30A-2 (43)  
IDENTIFICATION ONLY.  
VN 2108N 10535E

HA NOI SAM SITE A17A-2 (45)  
VN 2052N 10554E

SITE CONSISTS OF 4 OCCUPIED REVETTED LAUNCH POSITIONS WITH MISSILES, AND AN OCCUPIED REVETTED CENTRAL GUIDANCE AREA.  
OB -- 4 SA-2 MISSILES AND 1 PROBABLE FAN SONG RADAR WITH ASSOCIATED VANS.

HA NOI SAM SITE B33-2 (64)  
VN 2110N 10544E

SITE CONSISTS OF 6 OCCUPIED REVETTED LAUNCH POSITIONS WITH MISSILES AND AN OCCUPIED REVETTED CENTRAL GUIDANCE AREA.
OB -- 6 SA-2 MISSILES AND A PROBABLE FAN SONG RADAR AND ASSOCIATED VANS.

HA NOI SAM SITE D35-2 (75)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE C13-2 (81)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE C11-2 (84)  
VN 2055N 10615E  
ONLY 2 LAUNCH POSITIONS AND CENTRAL GUIDANCE AREA OBSERVED. THE 2 POSITIONS ARE OCCUPIED BY UNIDENTIFIED OBJECTS. CENTRAL GUIDANCE AREA CONTAINS 5 VANS AND A PROBABLE FAN SONG RADAR. OB -- PROBABLE FAN SONG RADAR AND 5 ASSOCIATED VANS.

HA NOI SAM SITE C12-2 (88)  
VN 2052N 10611E  
SITE IS UNOCCUPIED.

HA NOI SAM SITE C30D-2 (92)  
VN 2112N 10530E  
IDENTIFICATION ONLY.

HA NOI SAM SITE B07-2 (95)  
VN 2108N 10609E  
SITE IS UNOCCUPIED.
SECRET
BLACK SHIELD X001, 31 MAY 1967

HA NOI SAM SITE D06-2 (105) VN 2118N 10621E
IDENTIFICATION ONLY.

HA NOI SAM SITE B34-2 (117) VN 2114N 10544E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE A27-2 (99) VN 2051N 10637E
SITE CONSISTS OF AT LEAST 2 OCCUPIED REVETTED LAUNCH POSITIONS WITH PROBABLE MISSILES, AND AN OCCUPIED CENTRAL GUIDANCE AREA.
OB — 2 PROBABLE SA-2 MISSILES AND A GUIDANCE RADAR.

HAI PHONG SAM SITE B34-2 (104) VN 2104N 10634E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE A06-2 (135) VN 2056N 10648E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE A14-2 (137) VN 2049N 10643E
IDENTIFICATION ONLY.

SECRET
BLACK SHIELD X001, 31 MAY 1967

HAI PHONG SAM SITE B06B-2 (139) VN 2057N 10651E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE D22-2 (152) VN 2024N 10624E
IDENTIFICATION ONLY.

HAI PHONG SAM SITE C21-2 (157) VN 2024N 10630E
SITE IS UNOCCUPIED.

HAI PHONG SAM SITE D23-2 (174) VN 2028N 10614E
AT LEAST 3 POSITIONS UNOCCUPIED.

HA NOI SAM SITE B17A-2 (118) VN 2051N 10555E
SITE RETURNED TO CULTIVATION.

HA NOI SAM SITE B01-2 (119) VN 2117N 10553E
SITE CONSISTS OF 5 OCCUPIED LAUNCH POSITIONS WITH MISSILES, 1 UNOCCUPIED LAUNCH POSITION, AND AN OCCUPIED GUIDANCE AREA.
DB -- 5 SA-2 MISSILES AND A GUIDANCE RADAR.

HA NOI SAM SITE A33-2 (125) VN 2109N 10546E
SITE IS UNOCCUPIED.
HA NOI SAM SITE D36A-2 (126)  
IDENTIFICATION ONLY.

HA NOI SAM SITE B35-2 (132)  
SITE RETURNED TO CULTIVATION.

HA NOI SAM SITE A01-2 (133)  
FIVE POSITIONS OCCUPIED BY LAUNCHERS WITH MISSILES, AND 1 UNOCCUPIED POSITION. GUIDANCE AREA CONTAINS PROBABLE FAN SONG RADAR AND AT LEAST 2 VANS. OB -- 5 SA-2 MISSILES AND A FAN SONG RADAR.

HA NOI SAM SITE C03A-2 (141)  
IDENTIFICATION ONLY.

HA NOI SAM SITE A14-2 (142)  
IDENTIFICATION ONLY.

HA NOI SAM SITE B07A-2 (148)  
SITE IS UNOCCUPIED.
HA NOI SAM SITE C17-2 (147)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE A31-2 (159)  
SITE CONSISTS OF AT LEAST 5 OCCUPIED LAUNCH POSITIONS WITH POSSIBLE MISSILES AND AN OCCUPIED GUIDANCE AREA. OB -- 5 POSSIBLE SA-2 MISSILES AND GUIDANCE RADAR.

HA NOI SAM SITE C17A-2 (161)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE B16-2 (162)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE C17B-2 (165)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE C16-2 (166)  
SITE IS UNOCCUPIED.

HA NOI SAM SITE D36B-2 (168)  
SITE IS UNOCCUPIED.
HA NOI SAM SITE B13-2 (184) VN 2050N 10605E
SITE IS UNOCCUPIED.

VINH LINH SAM SITE A25-2 (177) VN 1701N 10655E
SITE IS UNOCCUPIED.

VINH LINH SAM SITE A26-2 (187) VN 1701N 10654E
SITE IS UNOCCUPIED.

YU-LIN COASTAL DEFENSE AND RADAR SITE CH 1811N 10929E

3.5 NM SW OF YU-LIN ON LU-HUI-TOU CHIAO (POINT). SITE CONSISTS OF TWO 4-GUN UNOCCUPIED COASTAL DEFENSE POSITIONS AND 2 RADAR PADS. COASTAL DEFENSE POSITIONS ARE ON SOUTHERN SLOPE OF HILL. EASTERNMOST POSITIONS ARE UNDER CONSTRUCTION WITH ADITS TO THE REAR. WESTERNMOST POSITIONS ARE COMPLETE WITH COVERED FIRING POSITIONS. RADAR PADS ARE ON TOP OF THE HILL. TWO SMALL SUPPORT BUILDINGS AND AN OCCUPIED 4-GUN LIGHT AAA SITE ARE ADJACENT. A SUPPORT AREA CONTAINING 1 ADMINISTRATION, 15 BARRACKS, 1 MESSHALL, AND 17 SUPPORT BUILDINGS IS WEST OF THE RADAR PADS. FOUR ADITS ARE JUST SOUTH OF THE SUPPORT AREA.

DB -- 4 LIGHT AAA PIECES, 4 CARGO TRUCKS, AND 1 LARGE UNIDENTIFIED PIECE OF EQUIPMENT BEING TOWED TOWARD THE COASTAL DEFENSE SITE UNDER CONSTRUCTION.

HAI PHONG SAM SUPPORT FACILITY/ASSEMBLY AR VN 2056N 10628E
NO MISSILES OR MISSILE-ASSOCIATED EQUIPMENT OBSERVED.
Air Facilities
AIR FACILITIES

LING-SHUI AIRFIELD

Ob -- At least 9 probable FAGOT/FRESCO.

HAIPHONG/CAT BI AIRFIELD

Ob -- None observed.

HAIPHONG/KIEN AN AIRFIELD

Ob -- None observed.

HANOI/BAC MAI AIRFIELD

Ob -- None observed.

HANOI/GIA LAM AIRFIELD

Ob -- 9 FAGOT/FRESCO, 3 COLT, 1 possible COLT fuselage, 1 crate with left wing removed.

PHUC YEN AIRFIELD

Heavy clouds preclude detailed interpretation.
Ob -- 1 FISHBED observed.
HOA LAC AIRFIELD

IDENTIFICATION ONLY.

HA NOI HELICOPTER DISP AREA

HELICOPTER DISPERSAL AREA LOCATED 3.8 NM NORTH OF HA NOI ON NORTH BANK OF RED RIVER FROM WJ855325 TO WJ871318 CONTAINS AT LEAST 5 HOOK. A ROAD AND SMALL PARKING AREA ON THE NORTH SIDE OF THE AREA SERVES AS A PROBABLE TRANSSHIPPING POINT. OB -- 5 HOOK.
Naval Activity/Ports
SECRET
BLACK SHIELD X001, 31 MAY 1967

NAVAL ACTIVITY/PORTS

YU-LIN NAVAL BASE AND PORT

CH 1813N 10931E

LOCATED AT SE EDGE OF YU-LIN.
YU-LIN NAVAL BASE AND SHIPYARD, BE 0618-00001 --
FACILITIES INCLUDE 2 WHARVES, 2 MARINE RAILWAYS (EACH
WITH 3 WAYS), A FLOATING SHEARLEGS CRANE AND NUMEROUS
SUPPORT BUILDINGS.
YU-LIN PORT FACILITIES, BE 0618-00107 -- FACILITIES
INCLUDE A PIER, A QUAY (WITH 4 TEMPORARY HORIZONTAL POL
TANKS), SEVERAL SUPPORT BUILDINGS, AND A GRAVING DOCK
UNDER CONSTRUCTION (APPARENTLY COMPLETELY EXCAVATED
WITH PROBABLE FOOTINGS/PILING IN POSITION NEAR THE
CENTER OF THE EXCAVATION).
OB -- 1 KIANGNAN DE UNDERWAY APPROXIMATELY 3 NM SOUTH
OF YU-LIN HEADING SOUTH.
AT NAVAL BASE -- 3 KRONSHTADT-CLASS PC, 3
SHANGHAI-CLASS PTF, 11 POSSIBLE P-4-CLASS PT, 1 U.S.
LST-1 LST, AND 5 SMALL CRAFT.
AT PORT FACILITY -- 8 SHANGHAI-CLASS PTF (2 MOORED IN
ROADSTEAD), 1 POSSIBLE COMBATANT MOORED IN ROADSTEAD, 3
SMALL CRAFT, AND 4 CONSTRUCTION SUPPORT BARGES AT
GRAVING DOCK AREA.

HAI PHONG PORT FACILITIES

VN 2052N 10642E

VESSELS -- FOLLOWING DRY CARGO VESSELS OBSERVED IN PORT
AREA -- 4 LARGE AND 5 SMALL CARRIERS, AND NUMEROUS
BARGES. TEN DRY CARGO SHIPS (3 LARGE HATCH) AND 2 POL
TANKERS OBSERVED IN ROADSTEAD.
OB -- 1 PROBABLE SHANGHAI PTF, 1 J-TYPE
TRAWLER/MINESWEEPER, 1 SO-1 SC WITH DECK AWASH AT NAVAL
BASE PIER, AND NUMEROUS UNIDENTIFIED SMALL CRAFT.
Military Activity
SECRET

BLACK SHIELD X001, 31 MAY 1967

HO-KOU ARMY BARRACKS NORTH

CH 2232N 10357E

1.9 NM NORTH OF HO-KOU. MAIN AREA CONTAINS APPROXIMATELY 65 BUILDINGS. TWO VEHICLE PARKS LOCATED 2.2 NM WEST AND 1.7 NM WEST OF THE MAIN AREA CONTAIN A TOTAL OF 16 BUILDINGS. OB --- 9 PROBABLE CARGO TRUCKS.

LING-SHUI POSSIBLE MILITARY BARRACKS AREA

CH 1831N 11002E

IDENTIFICATION ONLY.

LING-SHUI MILITARY TRAINING AREA

CH 1828N 10958E

LOCATED 2.5 NM SW OF LING-SHUI. BARRACKS AREA APPEARS TO BE ASSOCIATED WITH LING-SHUI AIRFIELD (BE NO 0618-08408, COMOR 2C0072).

TSA-TI-PAO ROAD

CH 2302N 10341E

ROAD OBSERVED FROM 2253N 10333E TO THE NORTH VIETNAM BORDER AT 2230N 10358E. ROAD IS COMPLETE AND OPERATIONAL. NO NEW CONSTRUCTION OR VEHICLES OBSERVED.

HA NOI/LAO CAI RR SEGMENT 1

VN 2220N 10410E

TWENTY FIVE PIECES OF ROLLING STOCK AND 1 LOCOMOTIVE OBSERVED AT 222008N 1041024E AND 12 PIECES OF ROLLING STOCK ON SIDINGS AT 222536N 1040300E.
SECRET
BLACK SHIELD X001, 31 MAY 1967

HA NOI/LAO CAI RR SEGMENT 3
VN 2140N 10456E

RAIL LINE OBSERVED FROM 213210N 1050200E TO 212820N 1050600E. QUALITY OF PHOTOGRAPHY PRECLUDES DETERMINATION OF SERVICEABILITY OF RAIL LINE.

HA NOI/LAO CAI RR SEGMENT 4
VN 2120N 10520E

RAIL LINE OBSERVED FROM 212820N 1050600E TO 211800N 1052700E. QUALITY OF PHOTOGRAPHY PRECLUDES DETERMINATION OF SERVICEABILITY OF RAIL LINE.

HA NOI/LAO CAI RR SEGMENT 5
VN 2110N 10548E

LINE APPEARS SERVICEABLE FROM 210805N 1055230E TO 211200N 1054510E.

LANG NHON UNIDENTIFIED CONSTRUCTION
VN 2224N 10401E

NEW CONSTRUCTION ACTIVITY OBSERVED JUST SW OF LANG NHON AND 6.2 NM SE OF LAO CAI AT UTM UK995778. ACTIVITY CONSISTS OF SHORT SEGMENTS OF A POSSIBLE HARD-SURFACE ROAD ALONG THE BASE OF A HILL SW OF LANG NHON. ADDITIONAL ROAD CONSTRUCTION ACTIVITY EXTENDS A SHORT DISTANCE TO THE NW. ACTIVITY MAY BE ASSOCIATED WITH THE MINING OBSERVED IN THE AREA.
Complexes
SECRET
BLACK SHIELD X001, 31 MAY 1967

COMPLEXES

TUỲN QUANG COMPLEX VN 2148N 10512E

A SMALL URBAN COMPLEX LOCATED ON THE WEST BANK OF THE SONG LO (RIVER).

DIЕН BIỆN PHÚ COMPLEX VN 2122N 10301E

COMPLEX IS ABANDONED WITH MOST OF THE BUILDINGS EITHER DESTROYED OR RAZED.

LÃO CÁI COMPLEX VN 2229N 10357E

COMPLEX CONTAINS SEVERAL LIGHT INDUSTRIES, BARRACKS AREAS, STORAGE BUILDINGS, EXTENSIVE NEW ROAD CONSTRUCTION, AND MINING ACTIVITY. THE RAILROAD YARD IS ACTIVE AND CONTAINS 70 PIECES OF ROLLING STOCK, APPROXIMATELY 45 PERCENT OF THE YARD CAPACITY.

YĕN VIĒN RR CLASSIFICATION YARD VN 2105N 10555E

AREA CONTAINS 12 TRACKS (MAXIMUM LENGTH 2,300 FT) AT UTM WJ956316, A TURNING WYE, AND A NEW CLASSIFICATION YARD CONSISTING OF 7 TRACKS (MAXIMUM LENGTH 2,300 FT) AT WJ970332. TWO SECURED AREAS SE OF YARD HAVE BEEN DAMAGED. TEN UNIDENTIFIED RAILROAD CARS OBSERVED IN NEW YARD. CLOUDS AND CLOUD SHADOW LIMIT INTERPRETATION.