

PHOTOGRAPHIC INTERPRETATION REPORT



SOUTHEAST ASIA ACTIVITY REPORT

HANOI-THANH HOA RAIL SEGMENT NORTH VIETNAM

NPIC/R-49/68
COMPENDIUM 81
MAY 1968

GROUP 1 EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

WARNING

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Summary

The Hanoi/Thanh Hoa rail segment is the northern 94 nm of the 169 nm Hanoi/Vinh Rail Line. It is a single track, meter-gauge line which was originally constructed by the French. The communists have been able to maintain the rail segment to Thanh Hoa well enough to continue using their conventional rolling stock and steam locomotives. South of Thanh Hoa, however, poor track conditions and weak bridge structures have forced them to use smaller, modified, 2-axle rolling stock. Material is transloaded at two transshipment/transloading points in Thanh Hoa (see Items 107 and 108) and at the Thanh Hoa Rail Yard. A forthcoming summary will complete the rail study to Vinh.

The rail segment has 15 rail yards and 13 passing tracks. Although most of them have been subjected to U.S. airstrikes, a continuing effort is made by the North Vietnamese to repair damage as soon as possible. The yards average 1,500 ft long and 3 tracks wide and passing tracks average 1,400 ft in length. There is either a rail yard or passing track an average of every 3.5 nm with 6 nm the longest distance between a yard or passing track.

The rail segment has 19 rail spurs, six dead sidings, and 24 rail by-passes. The spurs usually service transshipment, storage, or small industrial areas. The sidings, all less than 1,200 feet long, are used for storing rolling stock.

Six transshipment points, including two transshipment/transloading points, are located at strategic points on the rail segment. Five are road-to-rail and one is water-to-rail.

Two of the three major storage areas on the rail segment are for coal, the third is a general storage area with open storage and 16 buildings. All three are in the Hanoi region.

NO FOREIGN DISSEM

HANOI

HANOI/HAIPHONG
RAIL LINE

(SEE MAP, PAGE 5)

HAI DUONG

HANOI/THANH HOA
RAIL LINE

(SEE MAP, PAGE 13)

PHU LY

NORTH VIETNAM

NAM DINH

THAI BINH

NINH BINH

(SEE MAP, PAGE 19)

DONG
THUONG
PHONG

GULF OF TONKIN

AMS SERIES JOG 1501
SHEETS NF 48-11, 15 & NE 48-3
1ST EDITIONS, 1965

NPIC M-3264

Page 2

THANH HOA/VINH
RAIL LINE

THANH HOA

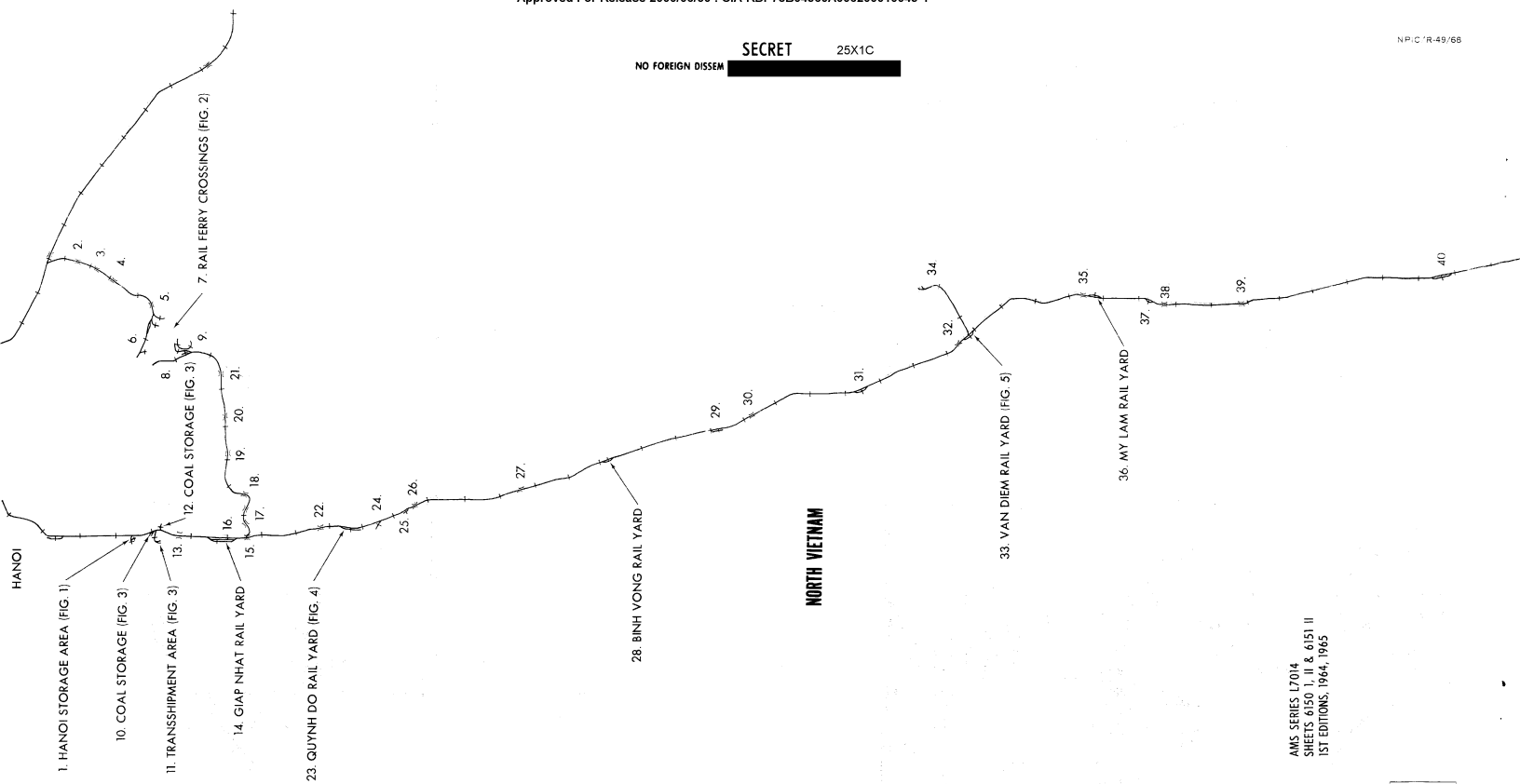
SECRET

NO FOREIGN DISSEM

25X1C

NO FOREIGN DISSEM **SECRET** 25X1C

NPIC R-49/68



NO FOREIGN DISSEM **SECRET** 25X1C

AMS SERIES L7014
SHEETS 6150 I, II & 6151 II
1ST EDITIONS, 1964, 1965

NPIC M-3266

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NO FOREIGN DISSEM

25X1C

7. Hanoi Rail Ferry Crossings over the Red River, 20-59N 105-54E
25X1D [REDACTED] Three rail ferry crossings are located on a rail bypass which circumvents the Hanoi area and connects the Hanoi-Haiphong rail line to the Hanoi-Thanh Hoa rail line. The rail ferry crossings consist of high, medium, and low water rail ferry slips. All 3 sets of rail ferry slips are serviceable but because of changing water levels only one set of slips is operational at any one time. (Figure 2).
25X1D
8. Thuong Thon Rail Siding, 20-59N 105-53E [REDACTED]. Short rail sidings parallels an approach to the Hanoi rail ferry crossings.
25X1D
9. Thuong Thon Rail Spur, 20-59N 105-53E [REDACTED]. Short rail spur extends east from an approach to the Hanoi rail ferry crossings. This spur serves an excavation which is a probable source of sand. Six pieces of earth-moving equipment are in the area.
25X1D
10. Hanoi Coal Storage Area, 20-59N 105-50E [REDACTED]. Two short rail spurs extend west from the main rail line to a secured coal storage area. (Figure 3).
25X1D
11. Phuong Liet Transshipment Area, 20-59N 105-50E [REDACTED]. Rail-served transshipment area contains 3 support buildings, a probable jib crane and stacks of unidentified material. (Figure 3).
25X1D
12. Phuong Liet Coal Storage Area, 20-59N 105-50E [REDACTED]. Small rail-served coal storage area east of the main line. (Figure 3).
25X1D
13. Phuong Liet Rail Bridge, 20-59N 105-50E [REDACTED]. Serviceable single-span rail bridge over a drainage ditch.
25X1D
14. Giap Nhat Rail Yard, 20-58N 105-50E [REDACTED]. Approximately 1,600 ft long by 3 tracks wide, the yard is approximately 70 yards west of the main rail line and is connected to the main rail line at both ends.
25X1D
15. Cau Tien Rail Bridge, 20-58N 105-50E [REDACTED]. Serviceable single-span rail bridge over a drainage ditch.
25X1D
16. Cau Tien Rail Bridge East, 20-58N 105-50E [REDACTED]. Serviceable single-span rail bridge over a canal.
25X1D
17. Giap Nhi Rail Bridge SW, 20-58N 105-51E [REDACTED]. Serviceable single-span rail bridge over a canal.
25X1D
18. Giap Nhi Rail Bridge SE, 20-58N 105-51E [REDACTED]. Serviceable 2-span rail bridge over a canal.

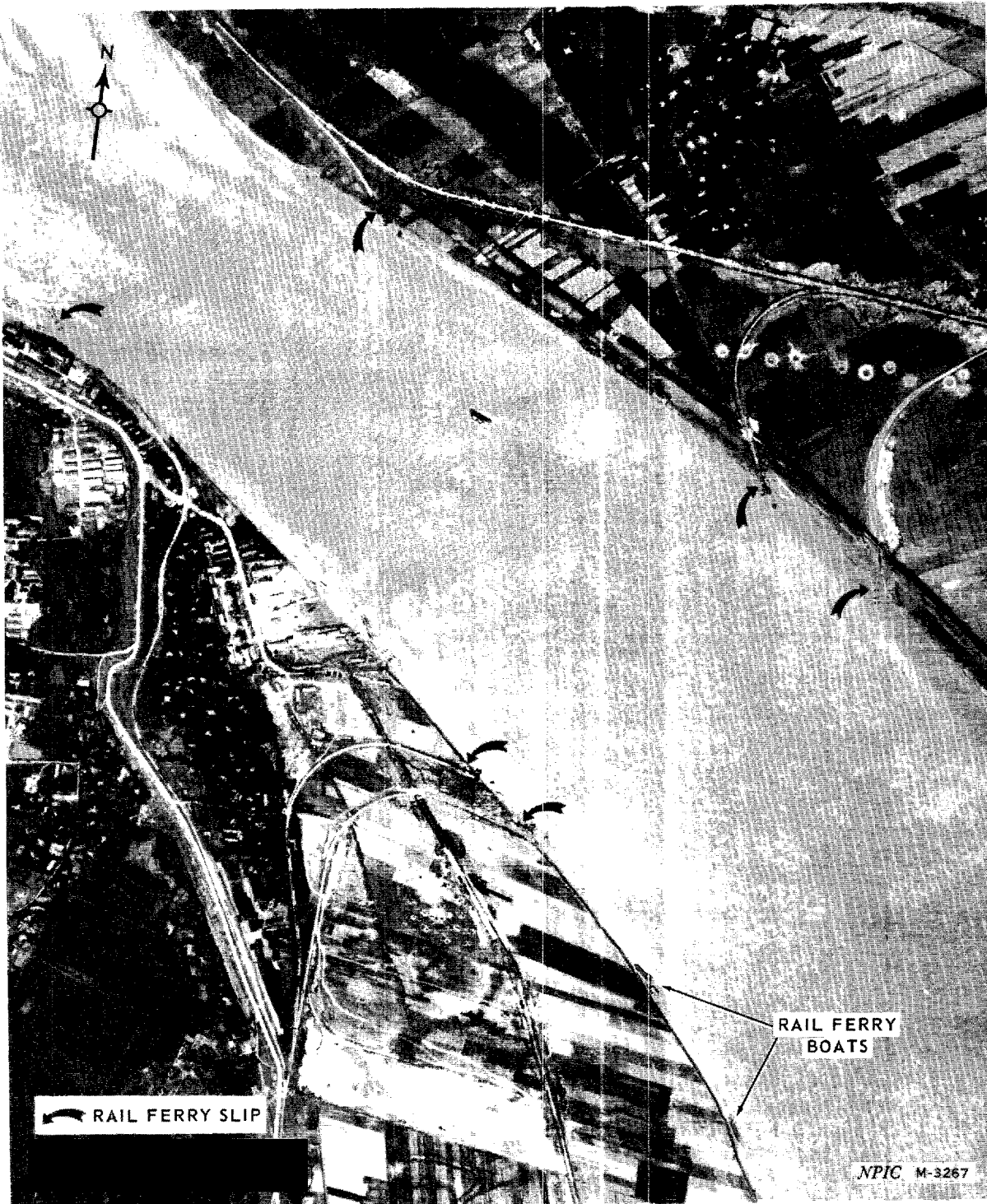
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NO FOREIGN DISSEM

25X1C

NO FOREIGN DISSEM

25X1C



25X1D

FIGURE 2. HANOI RAILROAD FERRY CROSSING OVER THE RED RIVER, NORTH VIETNAM.

NO FOREIGN DISSEM

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NO FOREIGN DISSEM

25X1C

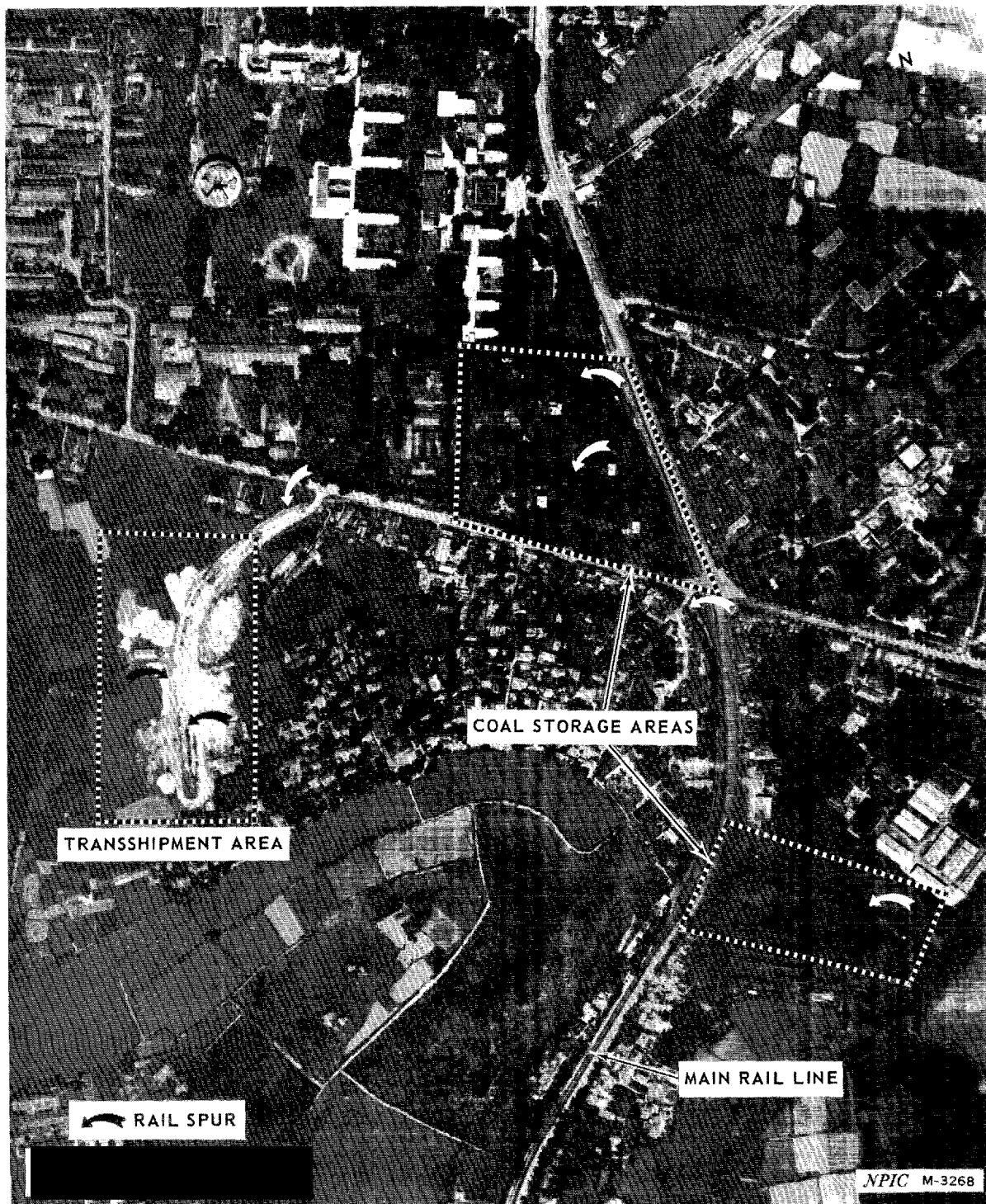


FIGURE 3. TRANSSHIPMENT AREA, COAL STORAGE AREAS, HANOI, NORTH VIETNAM.

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NO FOREIGN DISSEM

25X1C

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NO FOREIGN DISSEM

25X1C

25X1D

19. X. Chua Thuong Rail Bridge NW, 20-58N 105-52E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
20. X. Chua Thuong Rail Bridge NE, 20-58N 105-52E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
21. Nam Du Ha Rail Bridge, 20-58N 105-53E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
22. Van Dien Rail Bridge, 20-57N 105-50E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
23. Quynh Do Rail Yard, 20-56N 105-50E [REDACTED]. Yard is approximately 1,500 ft long by 4 tracks wide. Facilities include a station and 3 support buildings. A dismantled rail spur extends south from the yard to a partially destroyed light industry. (Figure 4). 25X1D
24. Quynh Do Rail Spur, 20-56N 105-50E [REDACTED]. Holding spur extends approximately 900 ft NW from the main line. 25X1D
25. Ngoc Hoi Rail Siding, 20-55N 105-51E [REDACTED]. An approximately 600 ft long rail siding on the west side of the rail line. 25X1D
26. Ngoc Hoi Rail Bridge, 20-55N 105-51E [REDACTED]. Serviceable single-span rail bridge over a stream. 25X1D
27. Thuong Dinh Rail Bridge, 20-53N 105-51E [REDACTED]. Serviceable single-span rail bridge over a stream. 25X1D
28. Binh Vong Rail Yard, 20-52N 105-52E [REDACTED]. Yard is approximately 1,500 ft long by 3 tracks wide. A station building is located east of the yard. 25X1D
29. Quat Dong Rail Siding, 20-50N 105-52E [REDACTED]. Approximately 900 ft long rail siding west of the main rail line. 25X1D
30. Kieu Thi Rail Bridge, 20-49N 105-52E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
31. X. Giua Passing Track, 20-48N 105-53E [REDACTED]. Approximately 1,400 ft long unserviceable passing track with a probable station building. 25X1D
32. Van Diem Rail Bridge, 20-46N 105-54E [REDACTED]. Serviceable single-span rail bridge over a drainage ditch.

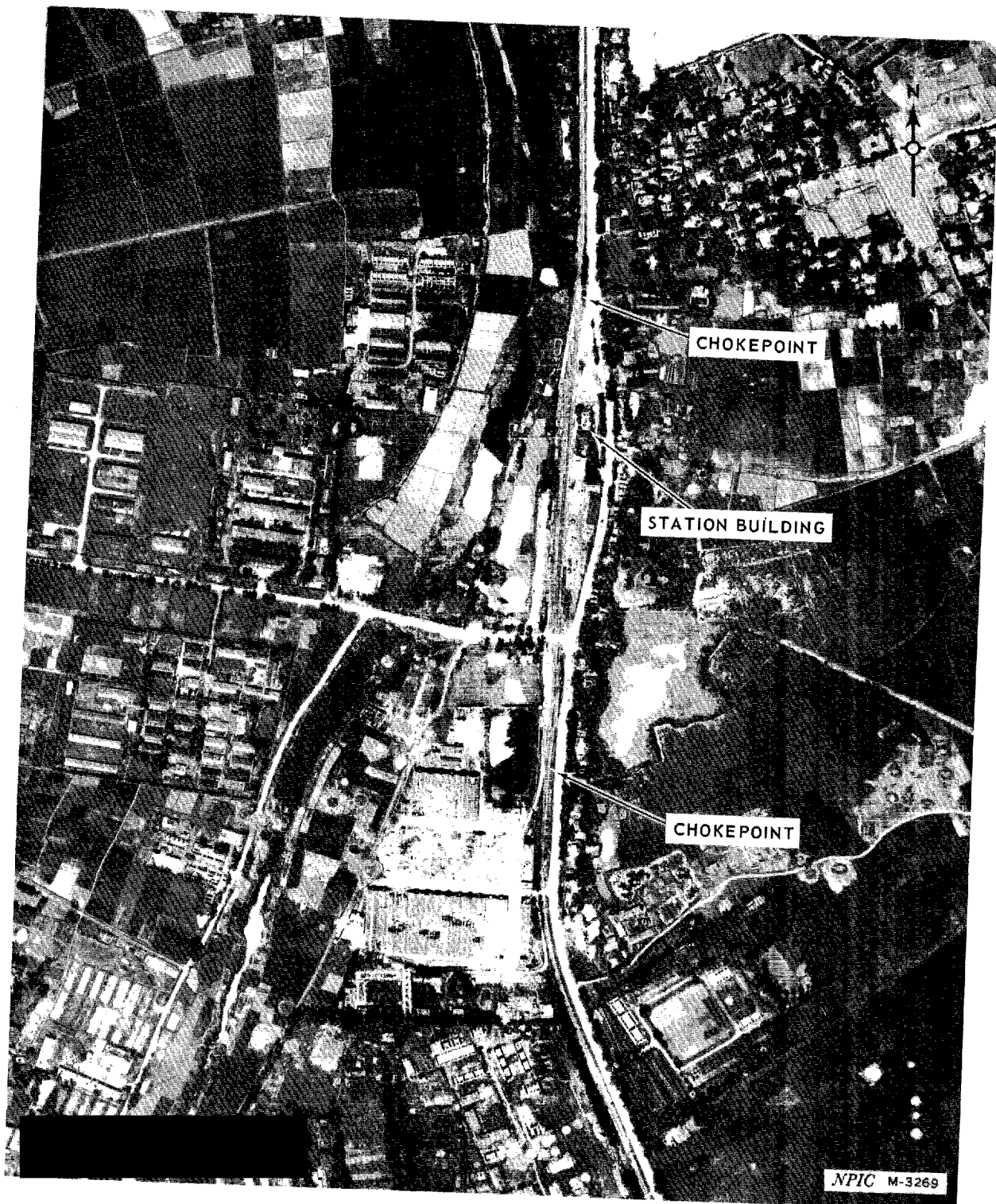
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NO FOREIGN DISSEM

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25X1C



25X1D

FIGURE 4. QUYNH DO RAILROAD YARD, NORTH VIETNAM.

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25X1C

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NO FOREIGN DISSEM [REDACTED]

25X1C

25X1D

33. Van Diem Rail Yard, 20-46N 105-54E ([REDACTED]). Yard is approximately 1,500 ft long by 3 tracks wide with a station building. (Figure 5).

25X1D

34. Do Le Rail Spur, 20-46N 105-55E ([REDACTED]). Rail spur extends 1.1 NM NE from the main rail line to a sugar refinery on the west bank of the Red River.

25X1D

35. My Lam Rail Bridge, 20-44N 105-55E ([REDACTED]). Serviceable single-span rail bridge over a canal.

25X1D

36. My Lam Rail Yard, 20-44N 105-55E ([REDACTED]). Yard is approximately 1,500 ft long by 3 tracks wide (only 2 tracks serviceable). All facilities have been destroyed.

25X1D

37. Yen Khoai Passing Track, 20-43N 105-54E ([REDACTED]). Track is approximately 1,200 ft long.

25X1D

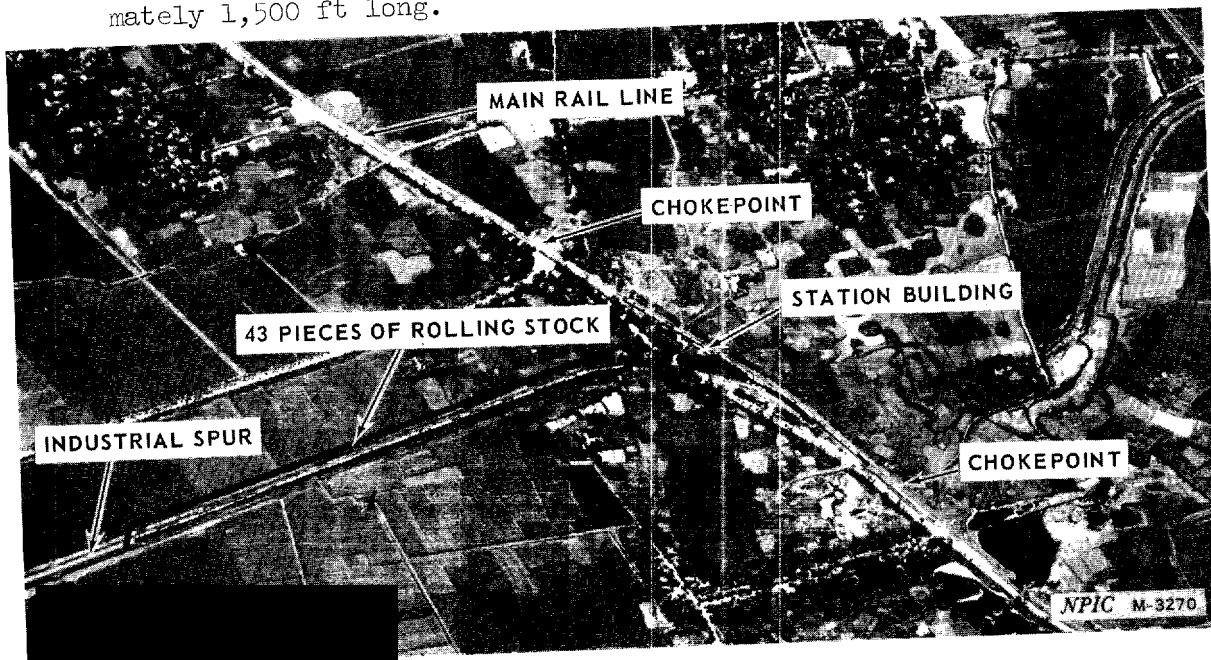
38. Yen Khoai Rail Bridge, 20-42N 105-54E ([REDACTED]). Serviceable single-span rail bridge over a canal.

25X1D

39. Bai Le Rail Bridge, 20-41N 105-54E ([REDACTED]). Serviceable 4-span rail bridge over a stream.

25X1D

40. Dong Van Passing Track, 20-38N 105-55E ([REDACTED]). Track is approximately 1,500 ft long.



25X1D

FIGURE 5. VAN DIEM RAILROAD YARD, NORTH VIETNAM.

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NO FOREIGN DISSEM [REDACTED]

25X1C

NPIC/R-49/68

SECRET

NO FOREIGN DISSEM [REDACTED] 25X1C

41. Phu Ly Multiple River Crossings over the Song Lap Ou Faux Canal Phu-
Ly, 20-32N 105-55E. Main 4-span rail bridge at [REDACTED] is unse- 25X1D
viceable with 3 spans destroyed. Three-span by-pass bridge at
25X1D [REDACTED] is serviceable.
42. Phu Ly Rail Yard, 20-32N 105-55E [REDACTED]. Original yard was ap- 25X1D
proximately 1,500 ft long by 4 tracks wide and contained a station
building. Only one track is now serviceable to through traffic and
the station building has been destroyed. A rail by-pass extends
west around the yard.
43. Phu Ly Transshipment Area, 20-31N 105-55E [REDACTED]. Rail-served 25X1D
transshipment area on the east bank of the Song Day (River). Fa-
cilities include a traveling jib crane, 2 probable jib cranes and
a probable kiln for drying ore.
44. Da Khieu Rail Bridge, 20-29N 105-59E [REDACTED]. Serviceable single- 25X1D
span rail bridge over a canal.
45. Station De Binh Luc Passing Track, 20-29N 106-00E [REDACTED] Track 25X1D
is approximately 1,400 ft long. Station building has been destroyed.
46. Thuong Tho Rail Bridge, 20-29N 106-01E [REDACTED]. Serviceable 25X1D
single-span rail bridge over a drainage ditch.
47. Do Thon Multiple River Crossings, 20-28N 106-02E. The main rail
25X1D bridge at [REDACTED] is partially destroyed; a camouflaged rail by-
pass bridge (probably 4 spans) at [REDACTED] is serviceable, however, 25X1D
the NW approach has been interdicted.
48. Thuong Dong Rail Bridge, 20-28N 106-02E [REDACTED]. Unserviceable 25X1D
single-span rail bridge over a canal. The bridge is slightly
damaged and the NW approach has been interdicted.
49. Sung Van Rail Yard, 20-27N 106-03E ([REDACTED]). Yard is approximate- 25X1D
ly 1,600 ft long by 3 tracks wide (one track partially destroyed).
All facilities have been destroyed.
50. Mon Nha Rail Bridge, 20-26N 106-05E [REDACTED]. Serviceable single- 25X1D
span rail bridge over a canal.
51. Le Thon Rail Bridge, 20-26N 106-05E [REDACTED]. Serviceable single- 25X1D
span rail bridge over a stream.
52. Van Don Rail Bridge, 20-26N 106-07E [REDACTED]. Serviceable single- 25X1D
span rail bridge over a canal.

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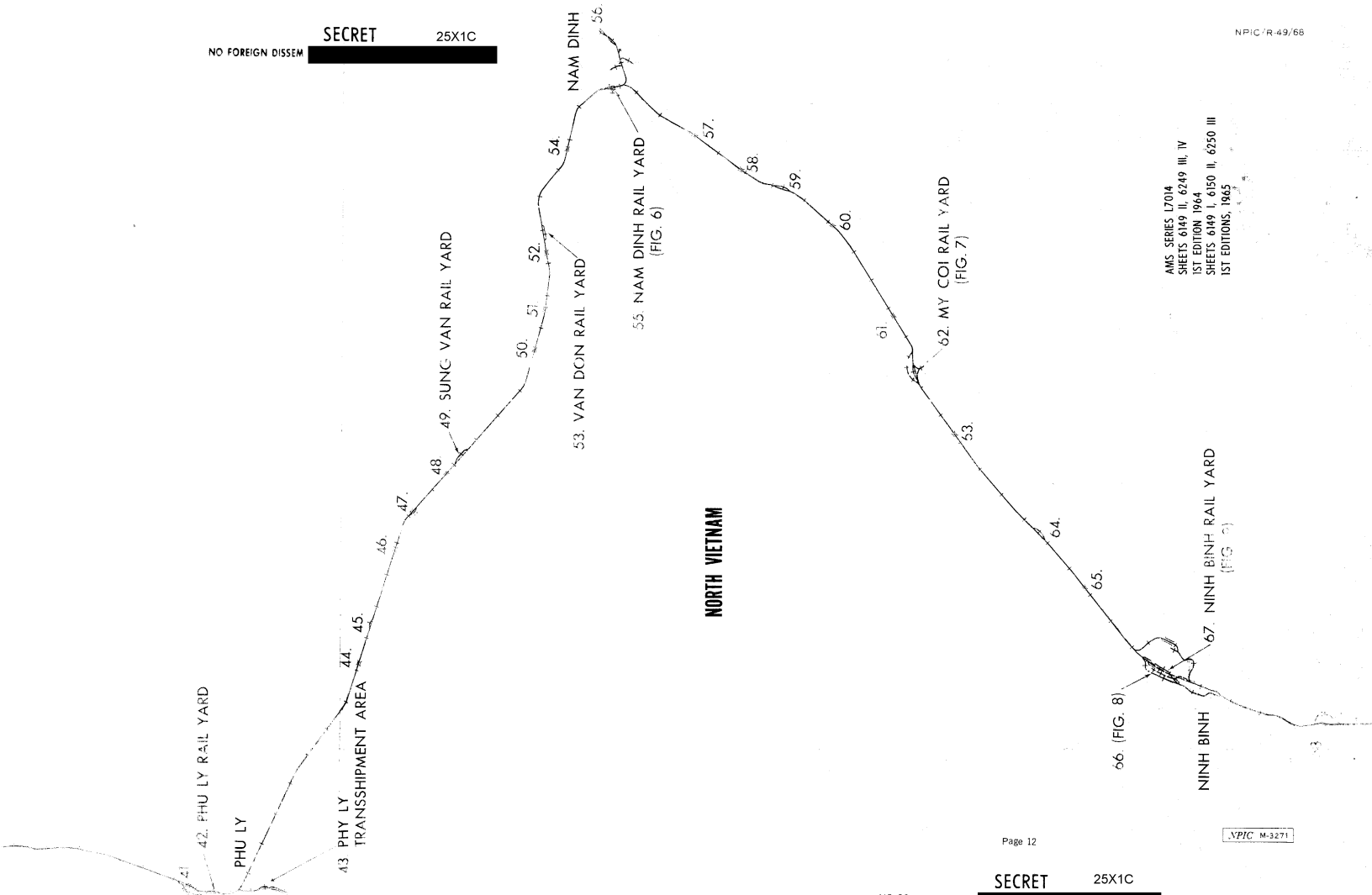
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25X1C

NPIC/R-49/68



AMS. SERIES L7014
SHEETS 6149 II, 6249 III, IV
1ST EDITION 1964
SHEETS 6149 I, 6150 II, 6250 III
1ST EDITIONS, 1965

NO FOREIGN DISSEM

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NO FOREIGN DISSEM [REDACTED]

25X1C

25X1D

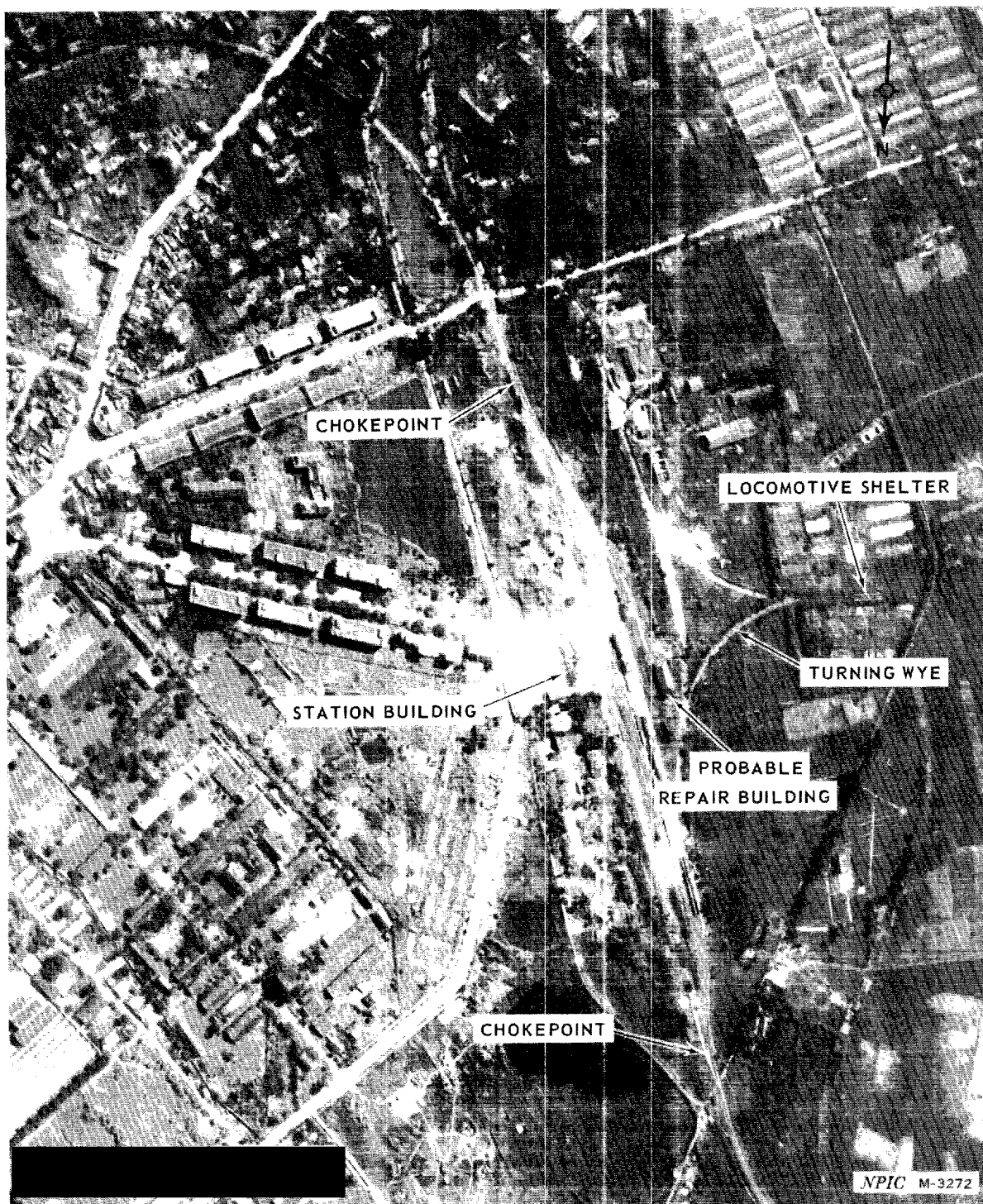
53. Van Don Rail Yard, 20-26N 106-07E [REDACTED]. Yard was originally approximately 1,600 ft long by 3 tracks wide, but two tracks have been interdicted and are being used as storage spurs. All facilities have been destroyed. 25X1D
54. Phu Oc Rail Bridge, 20-25N 106-09E [REDACTED]. Serviceable single-span rail bridge over a stream. 25X1D
55. Nam Dinh Rail Yard, 20-25N 106-10E [REDACTED]. Approximately 1,800 ft long by 5 tracks wide. Facilities include a probable repair building, station building, and a turning wye. (Figure 6).
56. Nam Dinh Rail Spur, 20-25N 106-10E. Rail spur extends NE from the main rail line at [REDACTED] to serve the Nam Dinh complex. The main spur terminates with two tracks at a small open storage yard at [REDACTED]. Short branch spurs serve industries at [REDACTED] and [REDACTED] and a destroyed POL storage area at [REDACTED]. A passing track serves a transshipment area adjacent to the Nam Dinh Giang (River) at [REDACTED]. 25X1D
57. Vu Ban Rail Bridge, 20-23N 106-09E [REDACTED]. Serviceable single-span rail bridge over a stream. 25X1D
58. Duong Lai Rail Bridge, 20-22N 106-08E [REDACTED]. Serviceable 2-span rail bridge over a canal. 25X1D
59. Trinh Xuyen Passing Track, 20-22N 106-08E [REDACTED]. Track is approximately 1,400 ft long and has a station building. 25X1D
60. To Cau Rail Bridge, 20-21N 106-07E [REDACTED]. Serviceable, probable 2-span rail bridge over a stream. 25X1D
61. Luong Kiet Rail Bridge, 20-20N 106-05E [REDACTED]. Serviceable single-span rail bridge over a canal. 25X1D
62. My Coi Rail Yard, 20-19N 106-04E [REDACTED]. Yard is approximately 1,400 ft long by 3 tracks wide. A turning wye is south of the yard adjacent to a hill. A rail by-pass is under construction to the north around the yard. (Figure 7). 25X1D
63. Ninh Xa Rail Bridge, 20-19N 106-03E [REDACTED]. Serviceable, probable 2-span rail bridge over a stream. 25X1D
64. Trung Thon Passing Track, 20-17N 106-01E [REDACTED]. Track is approximately 1,400 ft long and has a station building. 25X1D
65. Cao Bo Rail Bridge, 20-16N 106-00E [REDACTED]. Serviceable single-span rail bridge over a canal.

NO FOREIGN DISSEM [REDACTED]

25X1C

NO FOREIGN DISSEM

25X1C



25X1D

FIGURE 6. NAM DINH RAIL YARD, NORTH VIETNAM.

NO FOREIGN DISSEM

25X1C

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25X1C

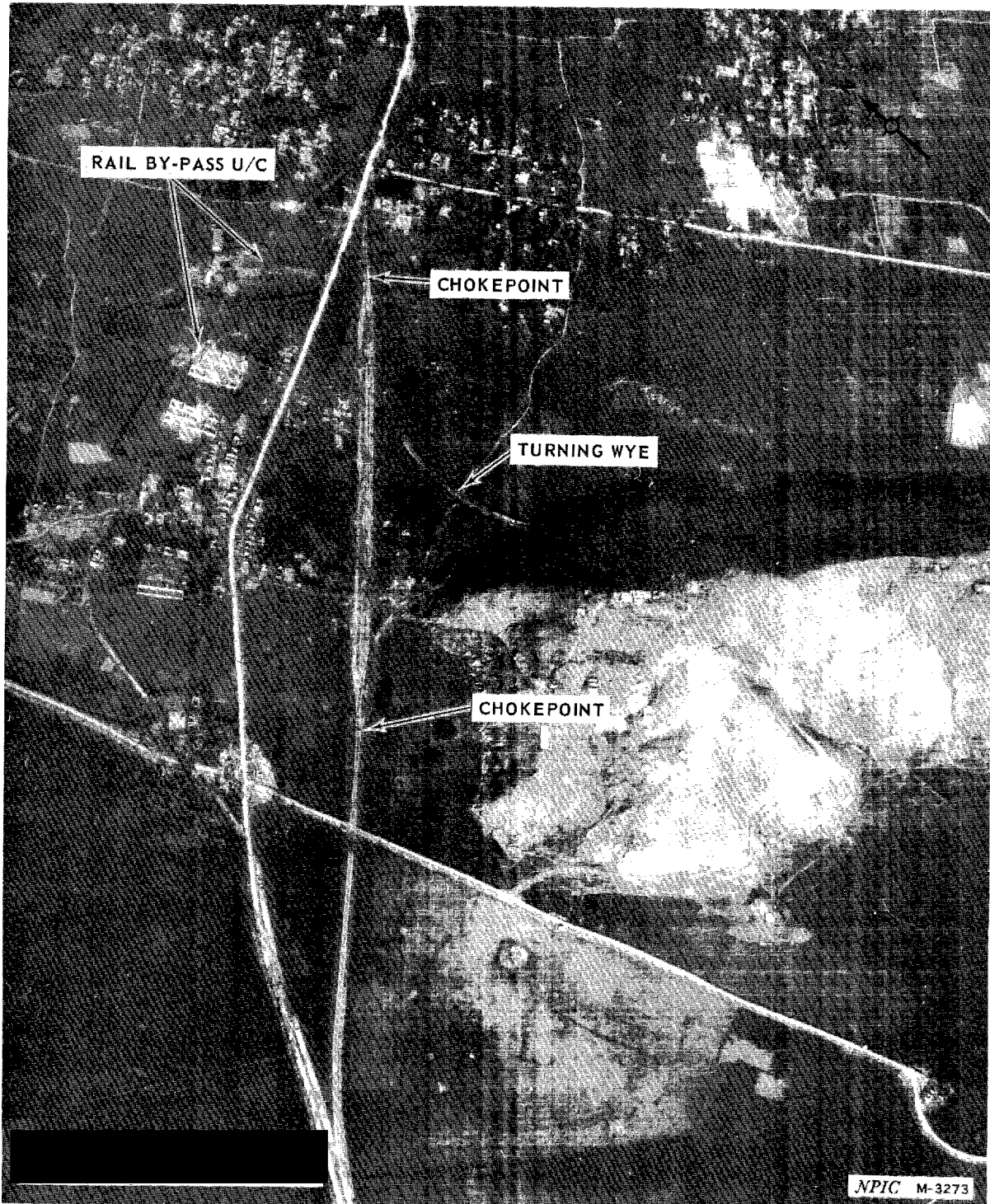


FIGURE 7. MY COI RAILROAD YARD, NORTH VIETNAM.

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25X1C

25X1D

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NO FOREIGN DISSEM [REDACTED]

25X1C

66. Ninh Binh Multiple River Crossings, 20-15N 105-59E. Main 7-span rail and highway bridge at [REDACTED] is unserviceable (at least 4 spans destroyed); rail ferry crossing at [REDACTED] is serviceable; multi-span rail by-pass bridge at [REDACTED] is unserviceable (at least 3 spans destroyed); rail ferry crossing at [REDACTED] is serviceable; previously existing rail pontoon bridge at [REDACTED] is totally destroyed; and a rail ferry crossing at [REDACTED] was under construction but construction apparently has been abandoned. A rail ferry boat is located at [REDACTED] (Figure 8). On photography of [REDACTED] during a bombing pause, 3 rail ferry boats were attached end-to-end at the ferry crossing at [REDACTED] providing a pontoon rail bridge (Figure 8 & 9).
67. Ninh Binh Rail Yard, 20-15N 105-59E ([REDACTED]). Original yard was approximately 1,500 ft long by 4 tracks wide. The yard has been totally destroyed with no evidence of reconstruction. The yard is circumvented by two rail by-passes (Figure 9).
68. Dong Trang Multiple River Crossings, 20-12N 105-58E. Main single-span rail bridge at [REDACTED] is unserviceable; five-span rail by-pass bridge at [REDACTED] is unserviceable with one span missing.

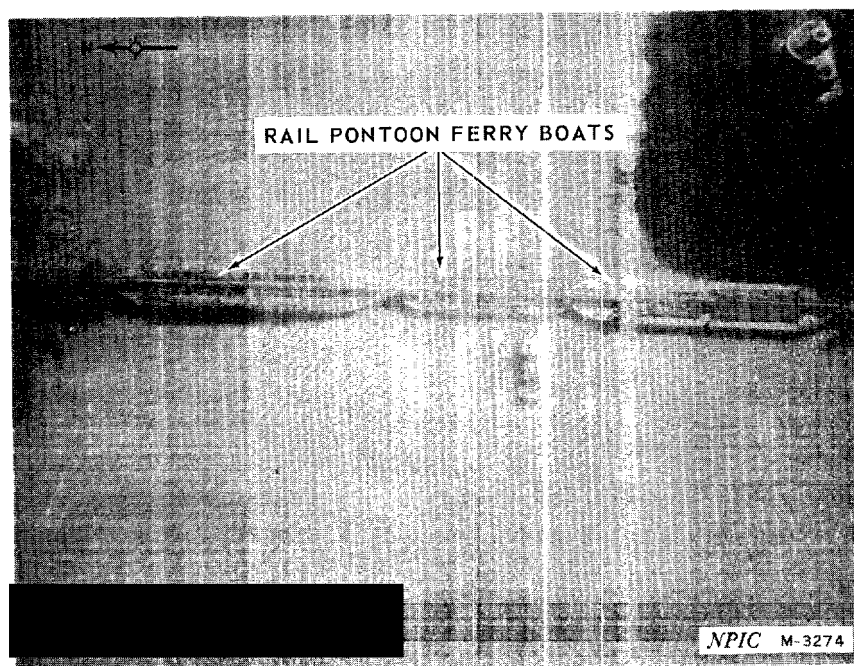


FIGURE 8. NINH BINH RAIL FERRY/PONTOON RIVER CROSSING, NORTH VIETNAM.

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NO FOREIGN DISSEM [REDACTED]

25X1C

NO FOREIGN DISSEM **SECRET** 25X1C

DESCRIPTION OF SELECTED FACILITIES

1. Hanoi Storage Area, 21-00N 105-50E **25X1D**. Rail-served storage area contains 13 storage buildings, 3 small support buildings, open storage, 3 cargo trucks, and 4 pieces of unidentified equipment. (Figure 1).
2. Ngo Thon Rail Bridge, 21-01N 105-55E **25X1D**. Serviceable single-span rail bridge over a canal.
3. Thon Ha Rail Bridge North, 21-00N 105-55E **25X1D**. Serviceable single-span rail bridge over a canal.
4. Thon Ha Rail Bridge South, 21-00N 105-55E **25X1D**. Serviceable single-span rail bridge over a canal.
5. Dong Da Ha Rail Bridge, 20-59N 105-54E **25X1D**. Serviceable two-span rail bridge over a drainage ditch.
6. Tho Khoi Passing Track, 20-59N 105-54E **25X1D**. The passing track is approximately 900 ft long and is located on the northern approach to a rail ferry crossing on the Red River.

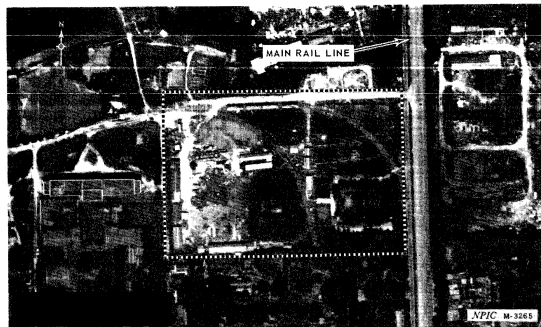


FIGURE 1. STORAGE AREA, HANOI, NORTH VIETNAM.

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NO FOREIGN DISSEM **SECRET** 25X1C

NPIC/R-49/68

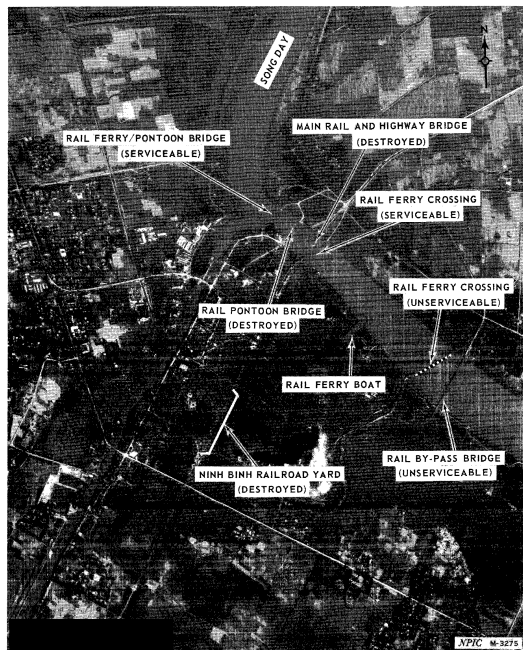


FIGURE 9. NINH BINH RAIL YARD AND RAILROAD RIVER CROSSINGS, NORTH VIETNAM.

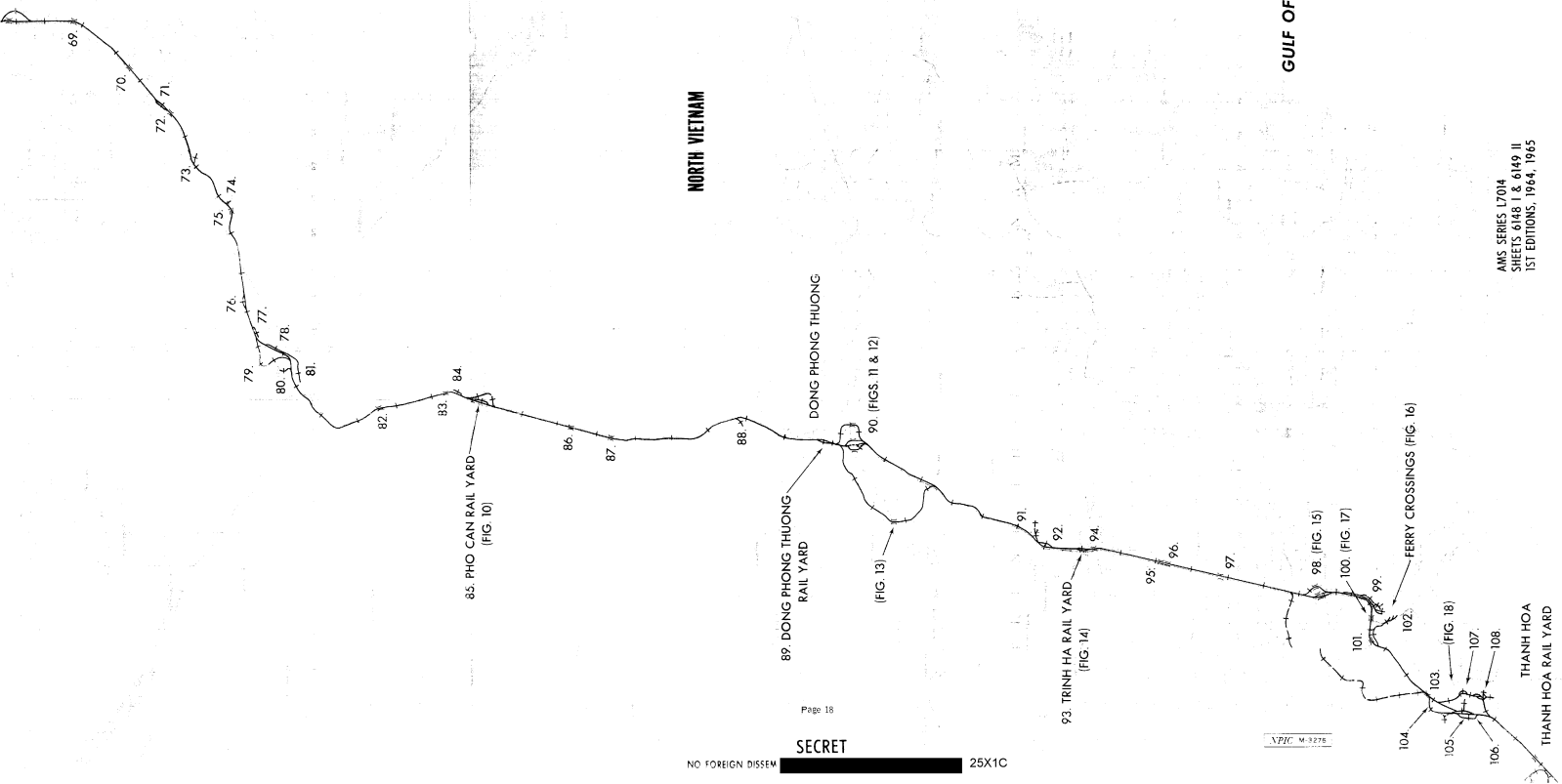
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NO FOREIGN DISSEM **SECRET** 25X1C

GULF OF TONKIN

NPIC R-49/98

NORTH VIETNAM



NO FOREIGN DISSEM **SECRET** 25X1C

NO FOREIGN DISSEM [REDACTED]

25X1C

25X1D

69. Mai Xa Rail Bridge, 20-11N 105-58E [REDACTED]. Serviceable 2-span rail bridge over a stream.

25X1D

70. Dai Son Rail Bridge, 20-10N 105-58E [REDACTED]. Serviceable single-span rail bridge over a stream.

25X1D

71. Ly Nhan Passing Track, 20-10N 105-56E [REDACTED]. Track is approximately 1,400 ft long with a destroyed station building adjacent.

25X1D

72. Dam Khanh Rail Bridge, 20-09N 105-56E [REDACTED]. Serviceable 2-span rail bridge over a canal.

73. Dam Khanh Rail Spur SW, 20-09N 105-55E. Serviceable spur terminating at the base of a hill at [REDACTED] 25X1D

74. Quang Suoi Rail Spur East, 20-09N 105-55E. Serviceable spur terminating at a locomotive shelter at [REDACTED] 25X1D

25X1D

75. Quang Suoi Rail Bridge East, 20-08N 105-54E [REDACTED]. Serviceable single-span rail bridge over a stream.

25X1D

76. Quang Suoi Passing Track, 20-08N 105-53E [REDACTED]. Track has been completely destroyed with no evidence of reconstruction. Main track circumvents the area.

25X1D

77. Quang Suoi Siding SW, 20-08N 105-52E [REDACTED]. Siding has been interdicted in one place.

25X1D

78. Gare De Dong Giao Passing Track, 20-08N 105-52E [REDACTED]. Track is approximately 1,400 ft long.

79. Gare De Dong Giao Rail By-pass Construction, 20-08N 105-52E. Construction apparently has been abandoned on a rail by-pass from [REDACTED] 25X1D [REDACTED] which circumvents a frequently interdicted area.

80. Gare De Dong Giao Rail Spur, 20-08N 105-52E. Serviceable rail spur extends north from the main line and terminates at the base of a hill at [REDACTED] 25X1D

81. Gare De Dong Giao Rail Spur South, 20-07N 105-52E. Partially serviceable rail spur extends south then west from the main rail line and terminates at the base of a hill at [REDACTED] 25X1D

NO FOREIGN DISSEM [REDACTED]

25X1C

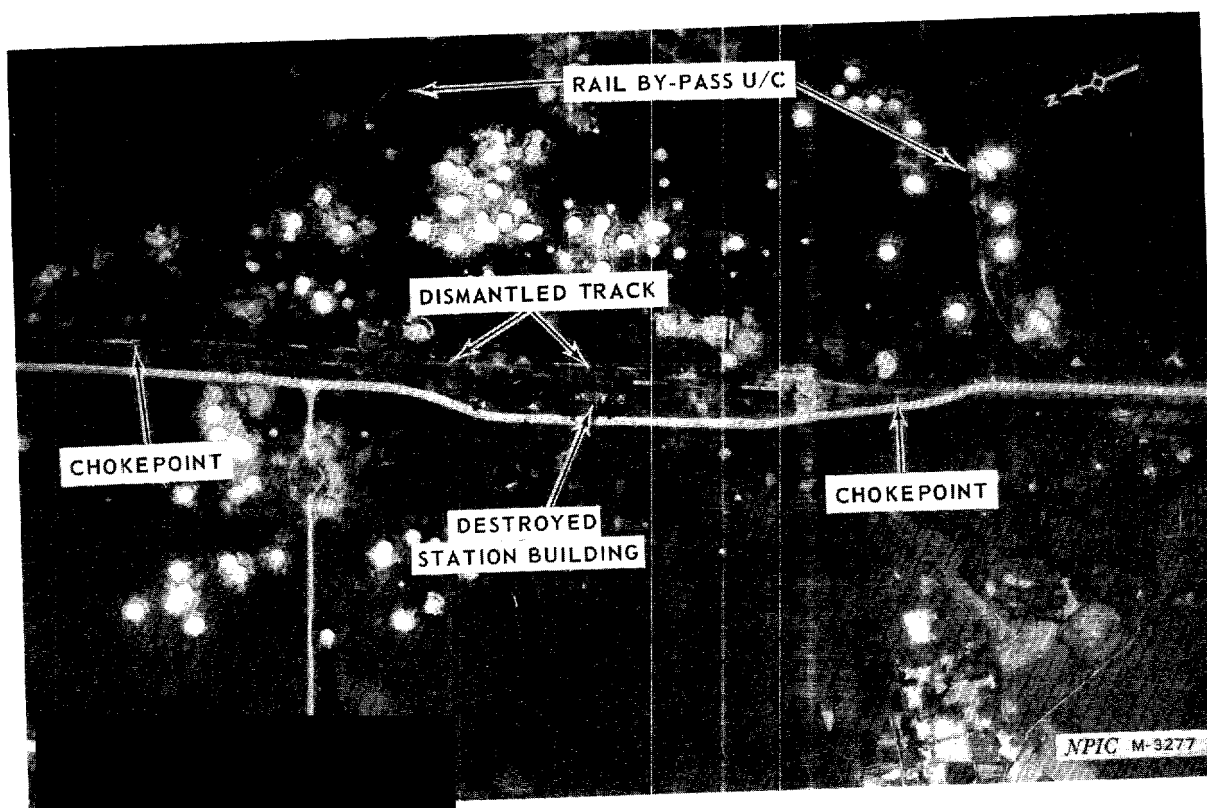
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NO FOREIGN DISSEM

25X1C

25X1D

82. Nghia Dong Rail Bridge, 20-06N 105-51E (). Serviceable single-span rail bridge over a drainage ditch. 25X1D
83. Bien Son Trang Rail Bridge, 20-05N 105-51E (). Serviceable single-span rail bridge over a stream. 25X1D
84. Bien Son Trang Rail Siding, 20-05N 105-51E (). Siding is approximately 1,200 ft long and has been interdicted in at least one place. 25X1D
85. Pho Can Rail Yard, 20-04N 105-51E (). Yard is approximately 1,450 ft long by 3 tracks wide (one track dismantled). A rail by-pass is under construction to the east around the yard. Track has been laid on 90 percent of the rail by-pass. (Figure 10). 25X1D
86. Dien Son Rail Bridge, 20-03N 105-51E (). Serviceable 3-span rail bridge over a stream. 25X1D
87. Quang Lang Doa Rail Bridge, 20-02N 105-51E (). Serviceable 3-span rail bridge over a stream.



25X1D

FIGURE 10. PHO CAN RAILROAD YARD, NORTH VIETNAM.

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NO FOREIGN DISSEM

25X1C

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NO FOREIGN DISSEM [REDACTED]

25X1C

88. Nhan Ly Rail Spur, 20-00N 105-51E. Partially serviceable rail spur extends SW from the main line and terminates at the base of a hill at [REDACTED] 25X1D
89. Dong Phong Thuong Rail Yard, 19-59N 105-50E ([REDACTED]). Yard is approximately 1,600 ft long by 4 tracks wide (two tracks have been destroyed/dismantled).
90. Dong Phong Thuong Multiple River Crossings, 19-58N 105-50E. The main rail and highway bridge at [REDACTED] and the rail by-pass bridge at [REDACTED] have been destroyed; a 9-span combination rail causeway/bridge is under construction at [REDACTED] a 6-span rail by-pass bridge at [REDACTED] has been partially destroyed but there is evidence of reconstruction; an 8-span rail by-pass bridge is under construction at [REDACTED] and a multi-span rail by-pass bridge at [REDACTED] is serviceable. A rail ferry boat is located west at [REDACTED] (Figures 11, 12, 13).
91. Phu Dien Rail Spur South, 19-55N 105-49E. Partially serviceable rail spur extends east from the main rail line and terminates at the base of a hill at [REDACTED].

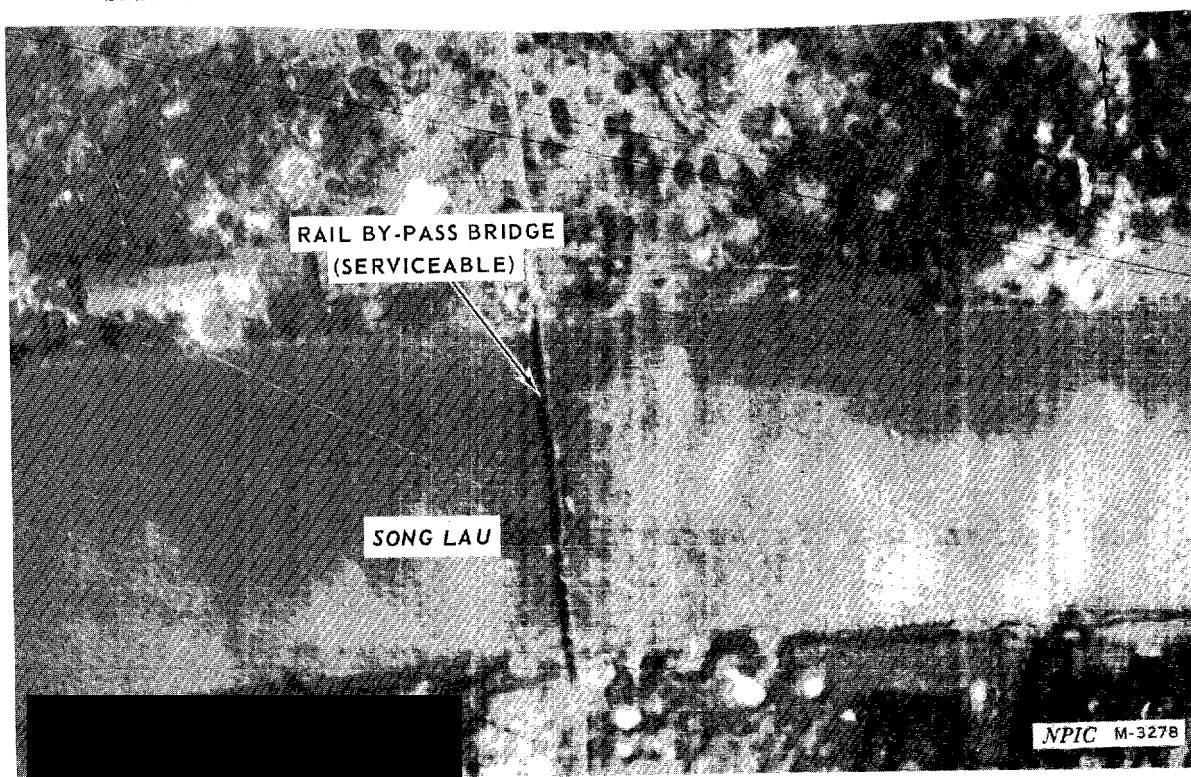


FIGURE 11. RAILROAD RIVER CROSSINGS, DONG PHONG THUONG AREA, NORTH VIETNAM.

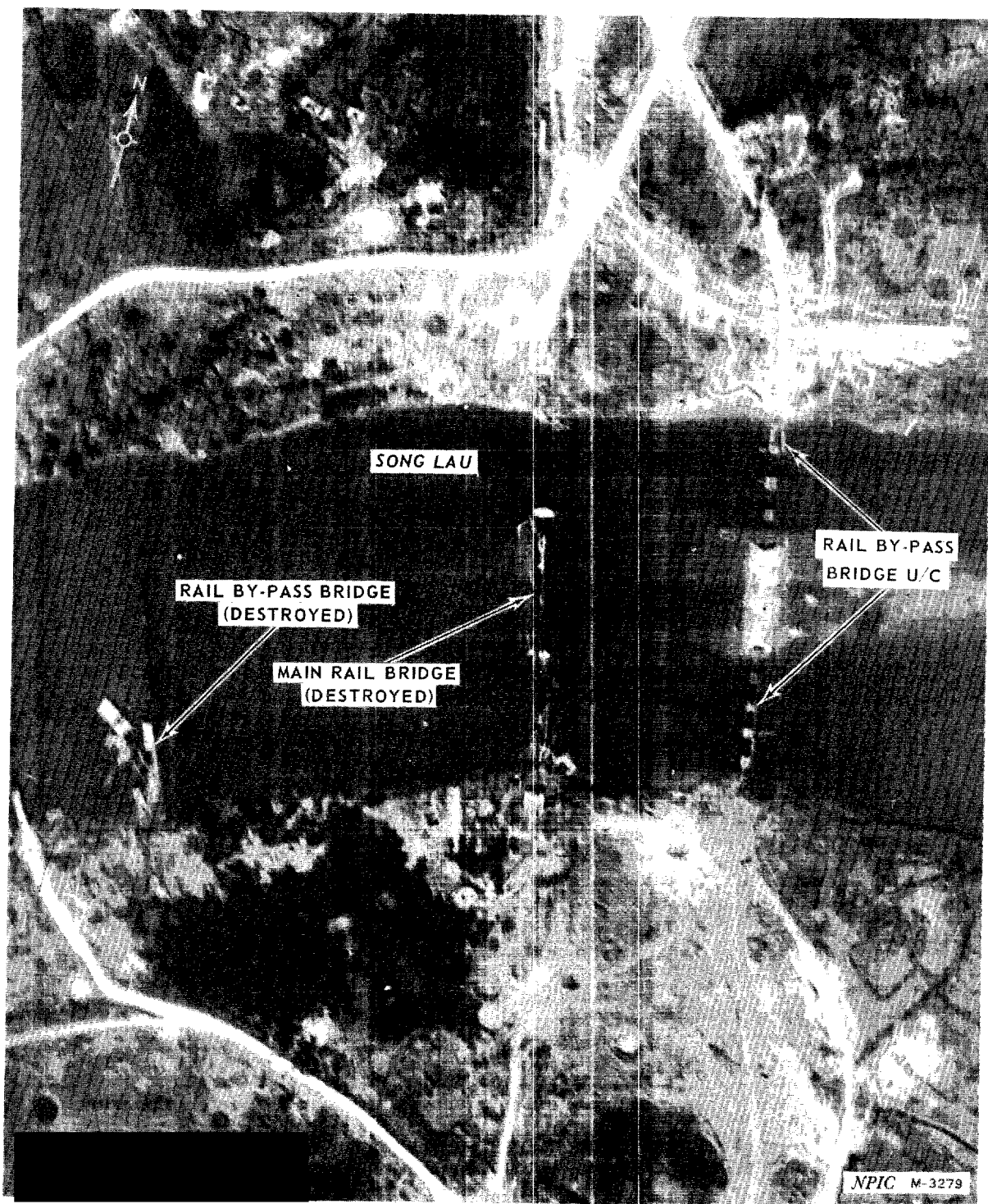
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NO FOREIGN DISSEM [REDACTED]

25X1C

NO FOREIGN DISSEM

25X1C



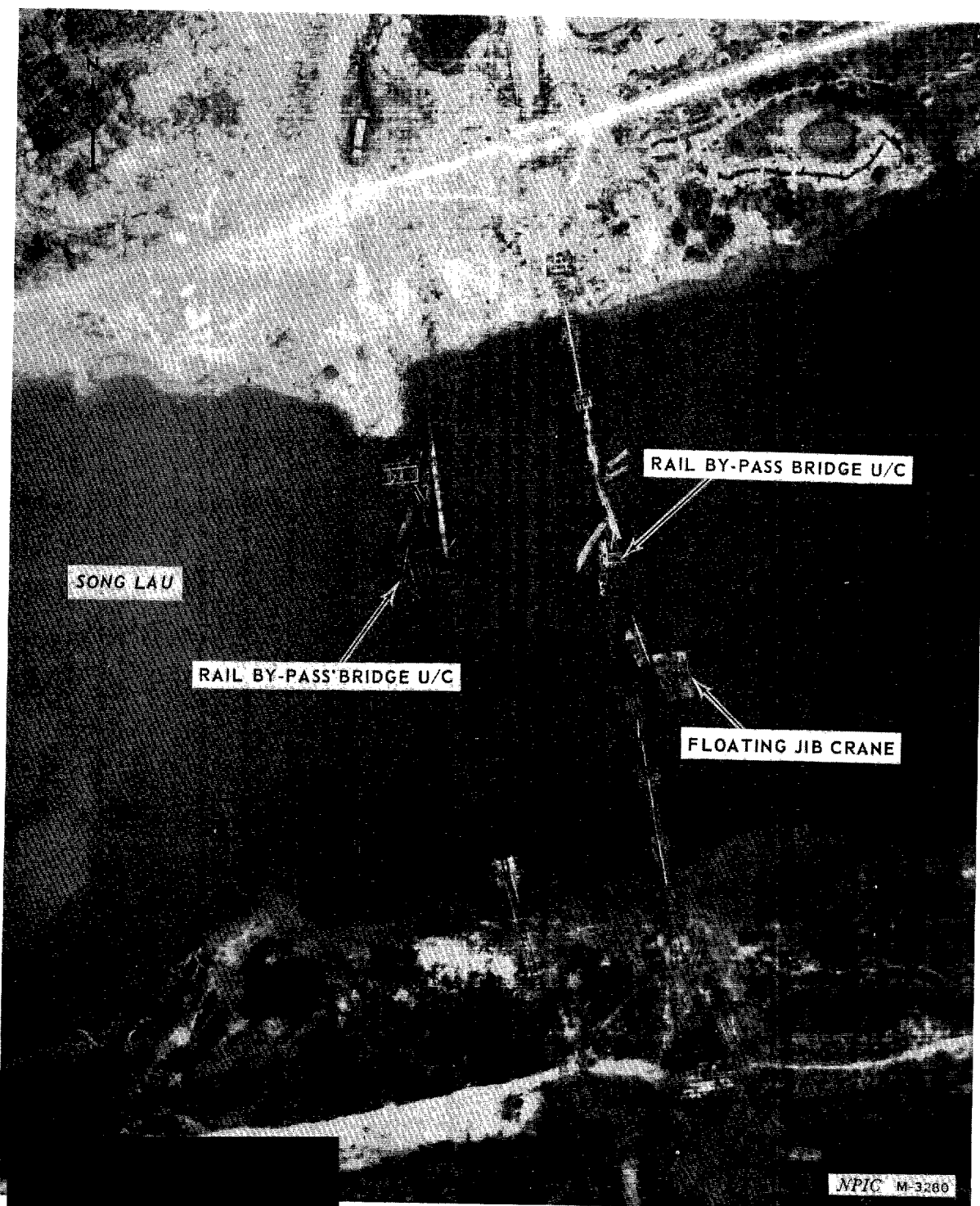
25X1D

FIGURE 12. DONG PHONG THUONG RAILROAD RIVER CROSSINGS, NORTH VIETNAM.

NO FOREIGN DISSEM

25X1C

25X1C



25X1D

FIGURE 13. DONG PHONG THUONG RAIL BY-PASS BRIDGES, NORTH VIETNAM.

25X1C

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~~SECRET~~

NO FOREIGN DISSEM

25X1C

25X1D

92. Luong Xa Passing Track, 19-55N 105-49E (). Track is approximately 2,000 ft long.

25X1D

93. Trinh Ha Rail Yard, 19-54N 105-49E (). Yard is approximately 1,500 ft long by 3 tracks wide (one track dismantled). All facilities have been destroyed. (Figure 14).

25X1D

94. Trinh Ha Rail Bridge, 19-54N 105-49E (). Serviceable single-span rail bridge over a stream.

25X1D

95. Phu Khe Rail Bridge South, 19-53N 105-48E (). Serviceable single-span rail bridge over a drainage ditch.

25X1D

96. Dong Khe Rail Bridge North, 19-53N 105-48E (). Serviceable single-span rail bridge over a stream.

25X1D

97. Oui Chu Rail Bridge, 19-52N 105-48E (). Serviceable, camouflaged rail bridge (probably 3-spans) over a drainage ditch.

25X1D

98. Phuong Dinh Multiple River Crossings, 19-51N 105-48E. The main rail line and highway bridge at () have been partially destroyed; a 7-span rail by-pass bridge at () is serviceable; and a 14-span rail by-pass bridge is in a late stage of construction at () (Figure 15).

25X1D

99. Nghia Son Rail Siding and Turning Wye (abandoned), 19-50N 105-48E (). An abandoned rail siding which terminates at an abandoned turning wye is located on the NE bank of the Song Ma (River).

25X1D

100. Thanh Hoa Multiple River Crossings, 19-50N 105-47E. The main 2-span rail and highway bridge is serviceable, two rail ferry crossings consisting of 3 partially constructed and one constructed rail ferry slips are located in the vicinity of () and a rail by-pass is under construction to the west around the main bridge from () to (). The angle of the approaches of this by-pass suggest a future rail ferry crossing. (Figures 16 and 17).

25X1D

25X1D

25X1D

25X1D

101. Tho Phuong Rail Overpass, 19-50N 105-47E (). Rail overpass over Route 1A.

102. Nam Ngan Rail Spur, 19-50N 105-47E. Short, holding spur extends SE from the southern approach of the Thanh Hoa rail ferry crossings at ().

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NO FOREIGN DISSEM

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NO FOREIGN DISSEM [REDACTED] 25X1C

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25X1D

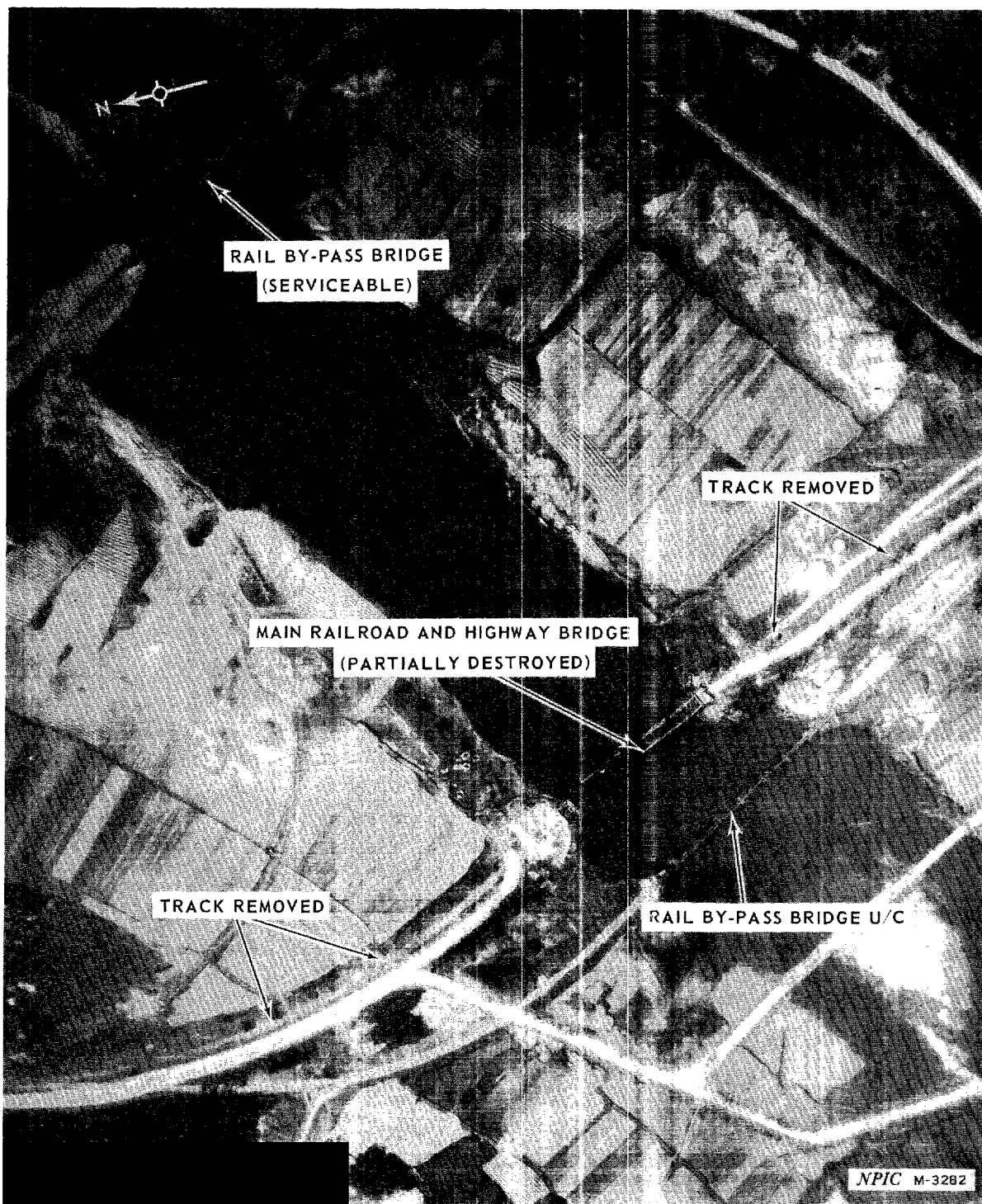
FIGURE 14. TRINH HA RAIL YARD, NORTH VIETNAM.

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NO FOREIGN DISSEM [REDACTED] 25X1C

~~SECRET~~

NO FOREIGN DISSEM

25X1C



25X1D

FIGURE 15. RAILROAD RIVER CROSSINGS, PHUONG DINH AREA, NORTH VIETNAM.

NO FOREIGN DISSEM

25X1C

SECRET

25X1C

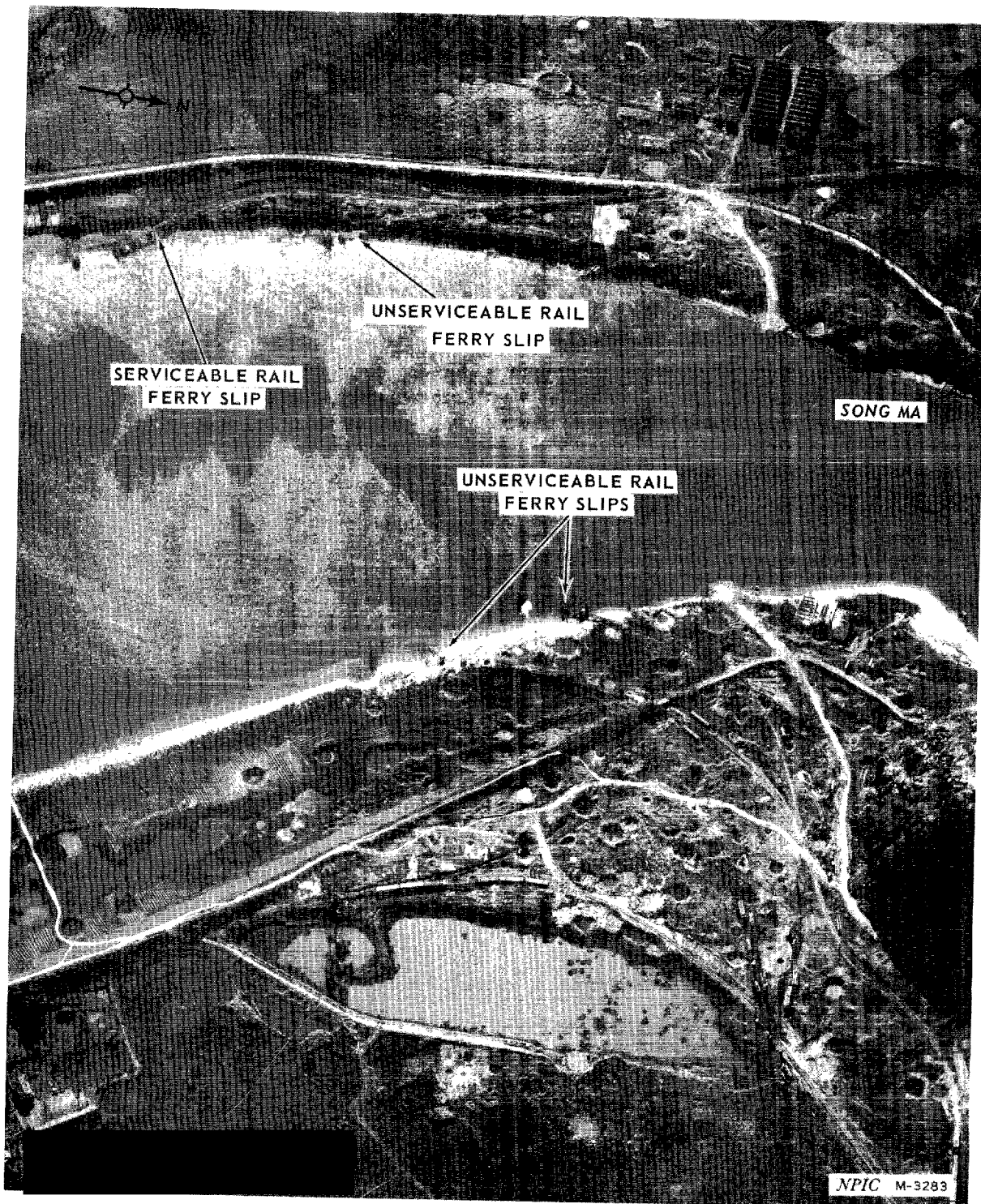
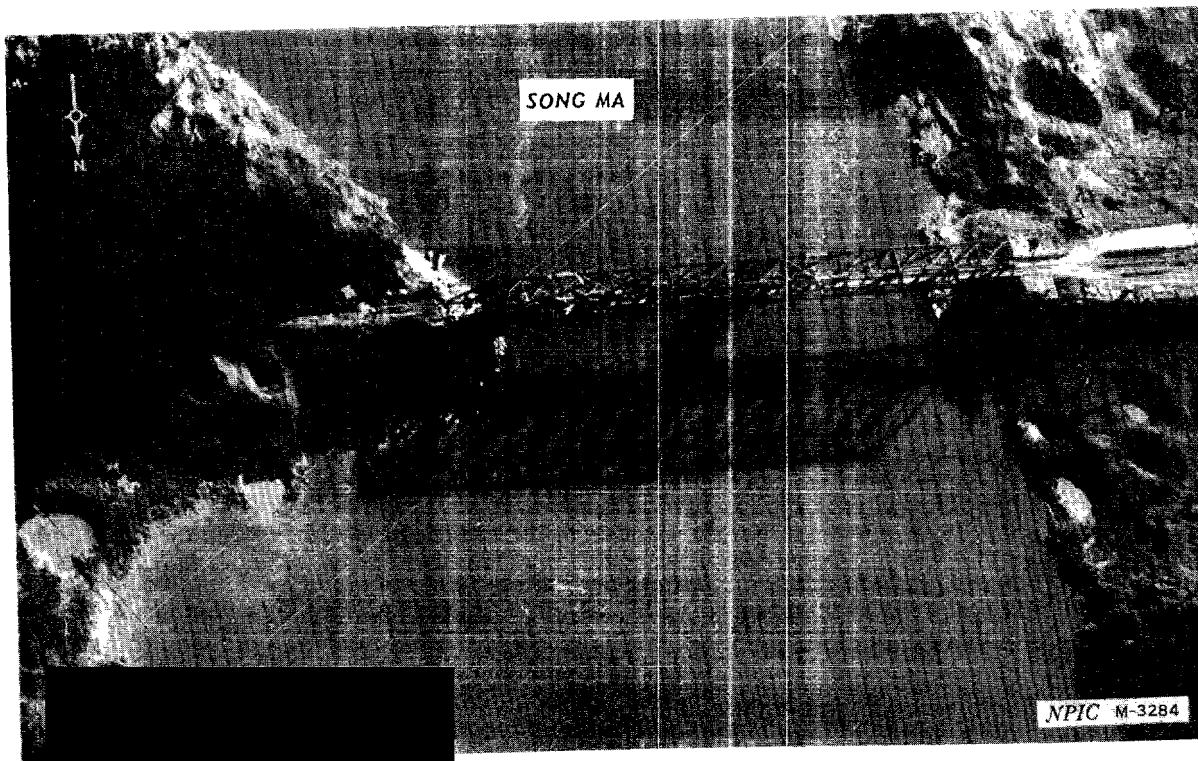


FIGURE 16. RAILROAD FERRY CROSSINGS, THANH HOA AREA, NORTH VIETNAM.

SECRET

25X1C

25X1C



25X1D

FIGURE 17. THANH HOA RAILROAD AND HIGHWAY BRIDGE, NORTH VIETNAM.

103. Tho Hac Rail Bridge 19-49N 105-46E [REDACTED]. Serviceable single-span rail bridge over a stream. 25X1D 25X1D
104. Dong Pho Transshipment Area, 19-49N 105-46E [REDACTED]. Facility consists of a vehicle turning loop adjacent to the main line and 3 semi-buried and 6 buried POL tanks near the turning loop. The area is located 0.6 NM north of Thanh Hoa Rail Yard. (Figure 18). 25X1D
105. Dong Tho Transshipment Area, 19-48N 105-46E [REDACTED]. Facility consists of a road-served transshipment point on a rail by-pass to the west around the Thanh Hoa Rail Yard. (Figure 18). 25X1D
106. Thanh Hoa Rail Yard, 19-48N 105-46E [REDACTED]. Original yard was approximately 1,800 ft long by 3 tracks wide. Air strikes have reduced the length of the yard to 1,100 ft. All facilities have been destroyed. An abandoned turning wye is located north of yard. Two rail by-passes circumvent the yard. The presence of both conventional rolling stock and the smaller 2-axle flat cars suggests the yard is used for transloading supplies. A short spur extends east to a transshipment point at [REDACTED] (Figure 18).

25X1D

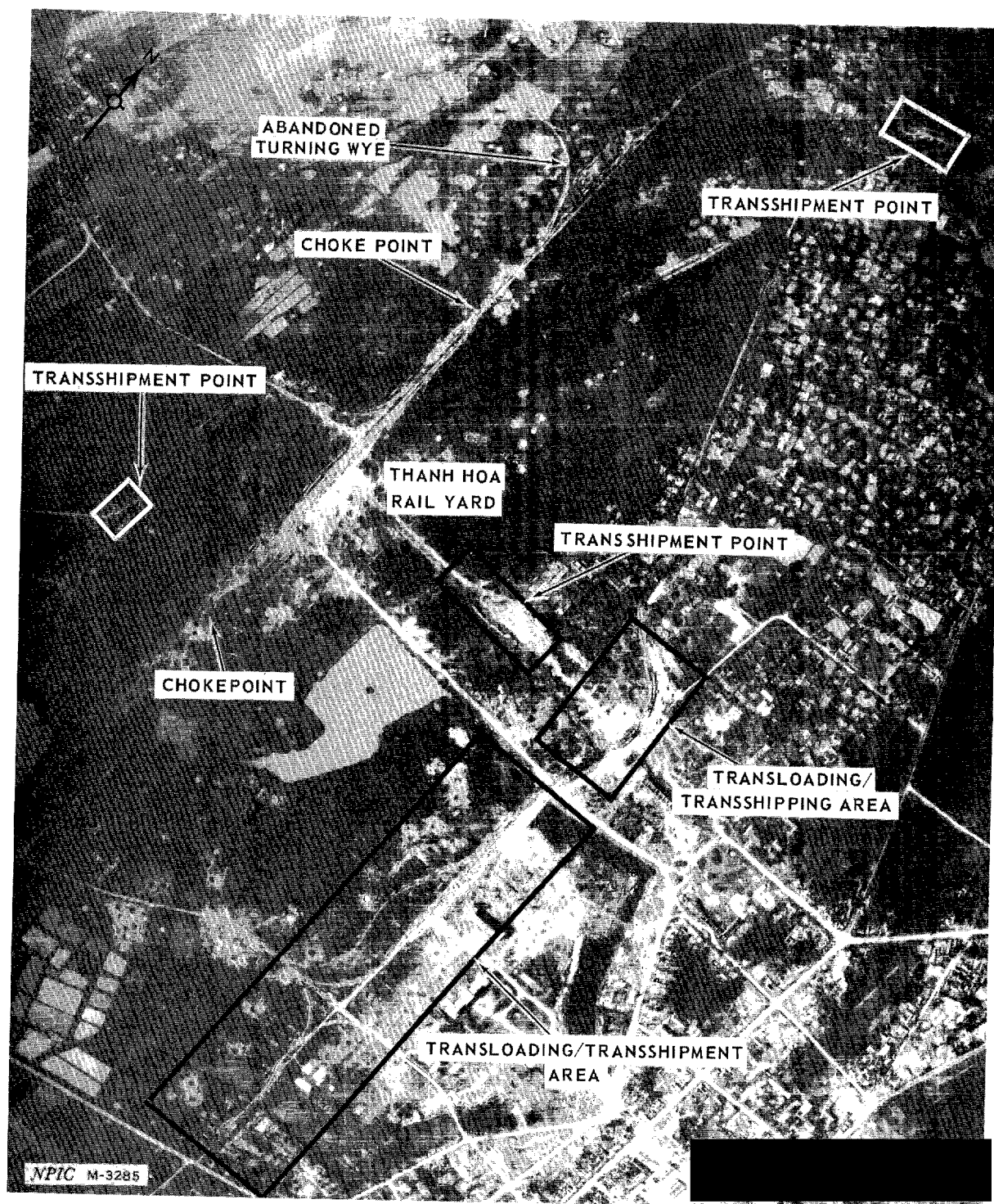
SECRET

25X1C

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25X1C



25X1D

FIGURE 18. THANH HOA RAIL YARD AND ASSOCIATED RAIL ACTIVITY, NORTH VIETNAM.

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25X1C

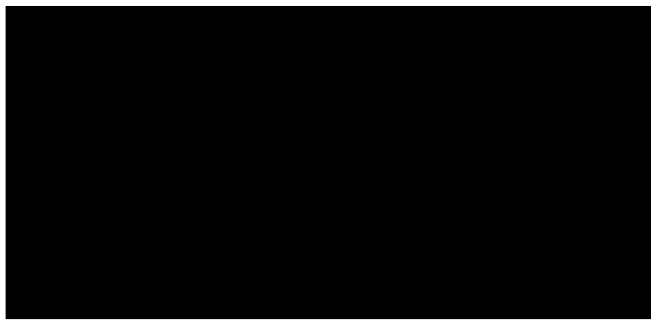
NO FOREIGN DISSEM

25X1C

107. Thanh Hoa Transloading/transshipping Area North, 19-48N 105-46E
25X1D [REDACTED]. Facility consists of a passing track on a rail by-pass around the Thanh Hoa Rail Yard. The passing track is served by a well used road. Seven POL tanks are in the area. (Figure 18).

108. Thanh Hoa Citadel Transloading/transshipping Area, 19-48N 105-46E
25X1D [REDACTED] Facility consists of an approximately 1,800-ft-long passing track with an adjacent and parallel road; a small rail-by-pass track apparently used as a holding track; and a serviceable turning wye. Heavy vehicle tracks are noted throughout the area. (Figure 18).

25X1D



NO FOREIGN DISSEM

25X1C

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NO FOREIGN DISSEM  25X1C

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NO FOREIGN DISSEM  25X1C