

Declass Review by NIMA / DoD

REPORT NO. 39

CIA/PIR 77155

DATE JUNE 1967

GROUP I Excluded from automotic downgrading and declassification SECRET

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Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010042-7 SECRET CIA/PIR-77155 25X1

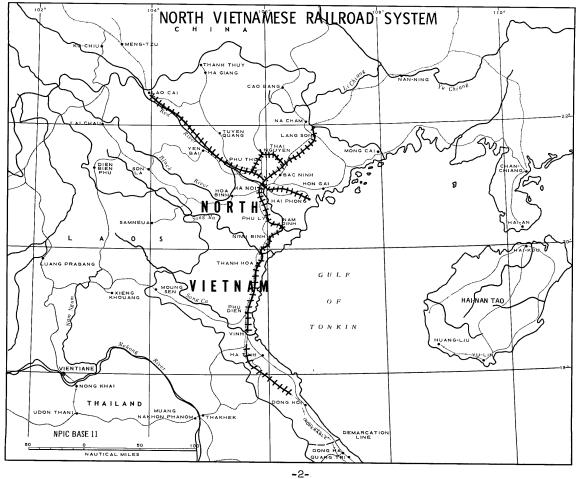
DDI IMAGERY ANALYSIS STAFF

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PIR 77155 FIGURE 1



25X1

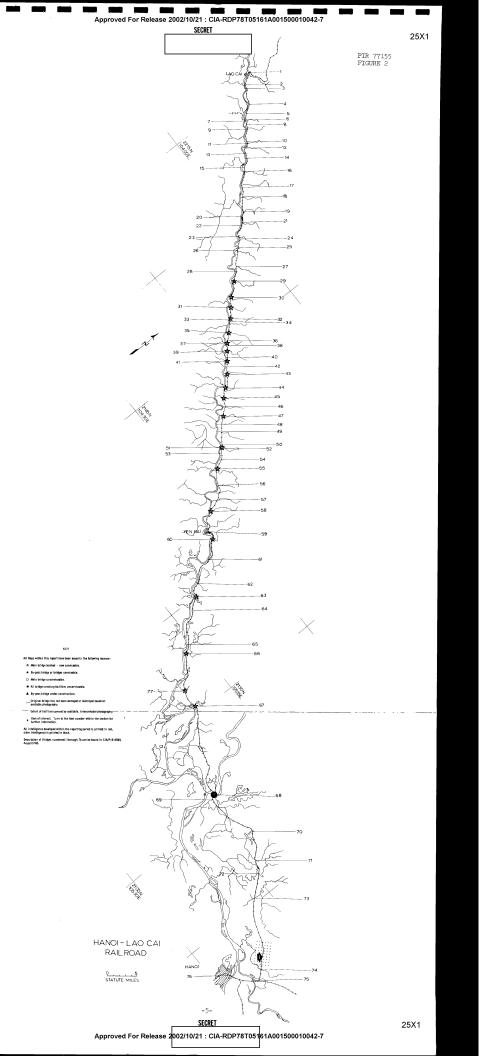
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SUMMARY

Those portions of the Hanoi/Lao Cai, Hanoi/Dong Dang, Hanoi/Dong Hoi, and the Thai Nguyen Rail Lines covered by interpretable photography appear open to through traffic. New rail construction activity is noted near Thai Nguyen. Two new railroad yards have been constructed in the vicinity of Yen Vien near the junction of the Hanoi/Lao Cai and Hanoi/Dong Dang Rail Lines.

	DDI IMAGERY	Y ANALYSIS STAF	F	
	INTRO	DUCTION		
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rt is publisherally-derived	ed period:	ically to he	ighlight	significant
1. The repor	t is based	<u>d on</u> aerial	photogra	phy availab
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lect the mos	t recent	raiiroad sy: status chana	res as re	does not flected by 1
7	ally-derived n. The repor chensive vie lect the mos	et is published period cally-derived intellig n. The report is base rehensive view of the lect the most recent	ally-derived intelligence relating. The report is based on aerial. The research relationship rehensive view of the railroad systems.	t is published periodically to highlight ally-derived intelligence relating to the The report is based on aerial photogra. The report is The report is rehensive view of the railroad systems and lect the most recent status changes as re

For ease in reporting the railroad system has been divided into five major lines: The Hanoi/Lao Cai Line, the Hanoi/Dong Dang Line, the Hanoi/Haiphong Line, the Hanoi/Dong Hoi Line, and the Thai Nguyen Line (Figure 1). The status of each line is shown on annotated maps and photos.



Approved For Release 2002/19/24 REPA-RDP78T05161A001500010042-7 25X1 DDI IMAGERY ANALYSIS STAFF STATUS OF PREVIOUSLY DAMAGED/DESTROYED BRIDGES HANOI/LAO CAI RAIL LINE 25X1 Bridge Number and Name Status 25X1 Lang Thip Railroad Bridge over S Ngoi Thip 25X1 Lang Kay Railroad Bridge NW over S Ngoi Key 25X1 Lang Kay Railroad Bridge over Ngoi S Chuc 25X1 Lang Kay Railroad Bridge S over S Nam Linh 25X1 Lang Khay Railroad Bridge over S Ngoi Kay 25X1 Khe Se Railroad Bridge S over S stream 25X1 Trai Hut Railroad Bridge NW over S Ngoi Cho 25X1 Trai Hut Railroad Bridge over S Nam Lam Som Dong Dep Railroad Bridge over 25X1 S Nam Muoi 25X1 Lang Quach Ngoai Railroad Bridge N S over Ngoi Vai 25X1 Lang Quach Ngoai Railroad Bridge S over Ngoi Quach

stream stream

30

32

35

37

39

41

43

44

45

47

48

51

55

67

* All data is compiled from photography
Symbols: S - serviceable, U - unserviceable

Phu Tho Railroad Bridge E over

Pho Chang Railroad Bridge over

Pho Hop Railroad Bridge over

Ngoi Trang

Ngoi Hop

25X1

25X1

25X1

25X1

S

S

S

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25X1

25X1

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 1: Hanoi/Lao Cai Rail Line

NAME

: New Rail Yard

BE

NA

COORDINATES

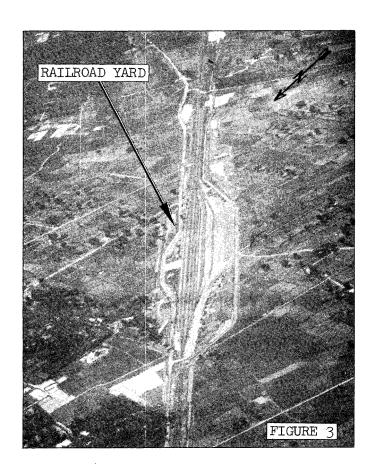
21 08N - 105 48E, WJ 915365

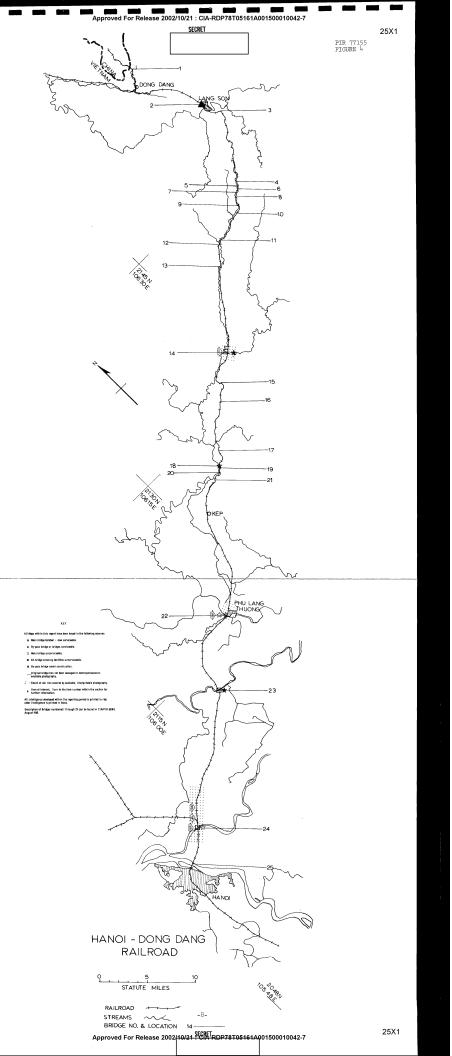
PHOTO REFERENCE

JOG (A) 1501, NF 48-11

MAP REFERENCE

A new rail yard was observed on the Hanoi/Lao Cai Rail Line, 3.5 nm southeast of the junction of the Hanoi/Lao Cai and Hanoi/Dong Dang Rail Lines. The yard is approximately 550 yards long and seven tracks wide and is presently empty. Poor quality of the photography precluded determining the gauge of the track.





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DDI IMAGERY ANALYSIS STAFF

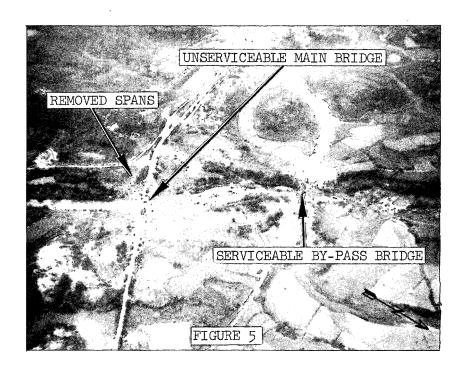
STATUS OF PREVIOUSLY DAMAGED/DESTROYED BRIDGES HANOI/DONG DANG RAIL LINE 25X1

		Bridge Number and Name	Status
25X1	14	Cao Nung Railroad Bridge over Song Hoa	Ū
25X1	14	Cao Nung Railroad Bridge E over Song Hoa	S
25X1	22	Bac Giang Railroad and Highway Bridge over Song Thuong	S
25X1	23	Dap Cau Railroad and Highway Bridge over Song Cau	U
25X1	23	Sap Cau Railroad Bridge over Song Cau	S
25X1	24	Hanoi Railroad and Highway Bridge over Canal des Rapides	Ū
25X1	24	Hanoi Railroad and Highway Bridge over Canal des Rapides	S
			ı

25X1	* All data is compiled from photography	
	Symbols: S - serviceable, U - unserv	/iceable

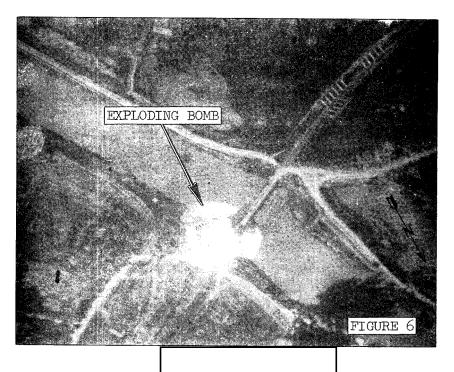
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Approved For F	Release 2002/108ECREA-RDP78T05161A001500040042-777155	
		25X1
	DDI IMAGERY ANALYSIS STAFF	
ITEM OF INTEREST NO.	1: Hanoi/Dong Dang Rail Line	
NAME	: Cao Nung RR Bridge	051/4
BE		25X1
COORDINATES	: 21 33N - 106 29E, XJ 553844	
PHOTO REFERENCE		25X1
MAP REFERENCE	: JOG (A) 1501, NF 48-12	
Three spans have	e been removed, leaving the piers and abutments intact.	
	repair just south of the bridge. The by-pass bridge	25X1
remai	ns serviceable.	20/1

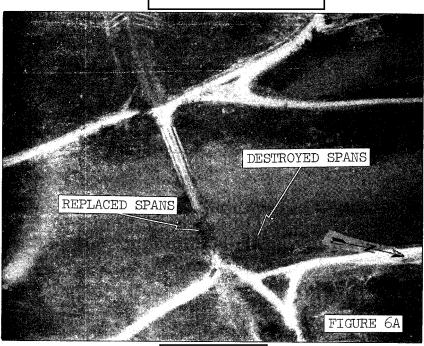


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25X1		<u> </u>
		DDI IMAGERY ANALYSIS STAFF
	ITEM OF INTEREST NO.	2: Hanoi/Dong Dang Rail Line
	NAME	: Bac Giang RR and Highway Bridge
25X1	BE	
	COORDINATES	: 21 16N - 106 11E, XJ 234527
25X1	PHOTO REFERENCE	
	MAP REFERENCE	: JOG (A) 1501, NF 48-11
25X1	with damage to two s by-pass bridge was n	the northeast approach to the bridge was interdicted pans, one pier, and the corresponding abutment. The
25X1		the two spans had been replaced and the pier and The by-pass bridge (not shown) was observed to have

PIR 77155



25X1



DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 3: Hanoi/Dong Dang Rail Line

NAME

: Completed Rail Yard North of Yen Vien

BE

: NA

COORDINATES

: 21 06N - 105 56E, WJ 973335

25X1

PHOTO REFERENCE

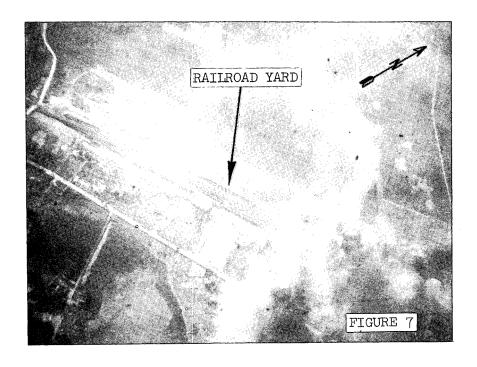
MAP REFERENCE

JOG (A) 1501, NF 48-11

25X1

A newly completed rail yard was observed on the Hanoi/Dong Dang Line approximately one nm northeast of the Yen Vien Railroad Classification Yard This yard was reported under construction in Report No. 22.

The yard is comprised of approximately seven tracks and is probably serviceable from both sides; however, smoke and debris from exploding bombs obscure a view of the northeast part of the yard. The gauge of the track cannot be determined due to the quality of the photography.



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25X1

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 4: Hanoi/Dong Dang Rail Line

NAME : Completed Turning Wye at Yen Vien

BE : NA

COORDINATES : 21 05N - 105 55E, WJ 959321

PHOTO REFERENCE

MAP REFERENCE : JOG (A) 1501, NF 48-11

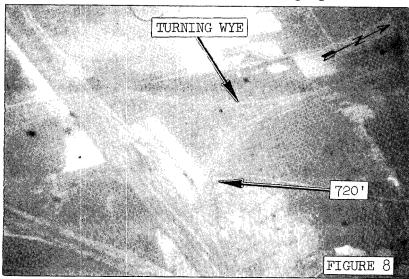
A newly completed turning wye has been observed 0.4 nm northeast of the Yen Vien Railroad Classification Yard ______ The turning wye was first noted under construction in Report No. 23.

25X1

25X1

The radius of curvature of the wye as previously determined is approximately 720 feet. This is the approximate radius of curvature of standard gauge turning wye located in China. However, the gauge of the track cannot be determined due to the quality of the photography.

The completion of this probable standard gauge turning wye and the new rail yard (Figure 7) near Yen Vien, along with the discovery of the new rail yard (Figure 3) on the Lao Cai Rail Line, establishes the probability that standard gauge track has been, or very soon will be, laid from Ping Hsiang to the Hanoi vicinity by at least one of two alternate routes. One is the direct route along the Hanoi/Dong Dang Rail Line. The other is from Ping Hsiang to Kep, then west to Thai Nguyen, south to Nguyen Khe, and finally southeast to Hanoi. This would provide a direct link between Hanoi and the Chinese standard gauge rail system and eliminate the need of transloading material between standard and meter gauge cars at the border.



-14-

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 5: Hanoi/Dong Dang Rail Line

NAME

: Hanoi RR and Highway Bridge over Canal des Rapides

25X1 I

BE

COORDINATES

: 21 04N - 105 55E

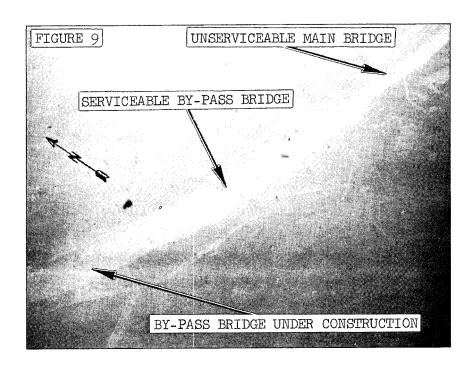
25X1

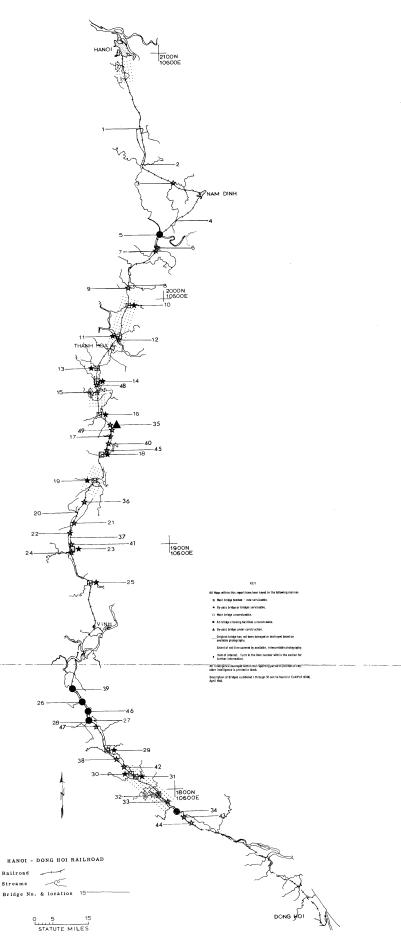
PHOTO REFERENCE

MAP REFERENCE

JOG (A) 1501, NF 48-11

25X1 Two spans of the six-span, through truss Hanoi RR and Highway Bridge
have been dropped. The moveable deck of the by-pass bridge
is partially extended, and the bridge is probably serviceable. An
additional by-pass bridge is under construction approximately 4,000 feet
east of the main bridge.





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		, , , , , , , , ,	25X1
	DDI IMAGERY ANALYSIS STAFF		

STATUS OF PREVIOUSLY DAMAGED/DESTROYED BRIDGES HANOI/DONG HOI RAIL LINE 25X1

		1	
	Bridge Number and Name	Status	
3	Cao Duong Railroad and Highway Bridge over canal	S	25X1
5	Ninh Binh Railroad and Highway Bridge over Song Day	Ū	25X1
5 ·	Ninh Binh Railroad Bridge over Song Day	U	25X1
5	Ninh Binh Railroad Pontoon Bridge	U	
6	Ha Thon Railroad and Highway Bridge over Song Vac	S	25X1
7	Ly Nhan Railroad and Highway Bridge over stream	S	25X1
9	Yen Xa Railroad and Highway Bridge over stream	S	25X1
10	Dong Phong Thuong Railroad and Highway Bridge over Song Len	U	25X1
10	Dong Phong Thuong Railroad Bridge S over Song Len	U	25X1
10	Dong Phong Thuong E Railroad By-Pass Bridge	S	25X1
11	Phuong Dinh Railroad and Highway Bridge over Lach Truong	U	25X1
11	Phuong Dinh Railroad Bridge over Lach Truong	S	25X1
12	Thanh Hoa Railroad and Highway Bridge over Song Ma	S	25X1

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25X1			
		DDI IMAGERY ANALYSIS STAFF	
		25X1	
		Bridge Number and Name	Status
25X1	13	Thien Linh Dong Railroad Bridge over Hoang Giang	U
25X1	13	Thien Linh Dong Railroad Bridge SW over River	Ū
25X1	13	Thien Linh Dong Railroad Bridge W over Hoang Giang	S
25X1	14	Thinh Lac Railroad Bridge over stream	Ū
25X1	14	Thinh Lac Railroad Bridge SSW over stream	S
25X1	15	Truong Quang Tien Railroad Bridge over Song Yen Tr	υ
25X1	15	Truong Quang Tien Railroad Bridge E over river	S
25X1	16	Thi Long Railroad Bridge over Suoi Cay Gang	υ
25X1	16	Thi Long Railroad Bridge SW over Suoi Cay Gang	S
25X1	17	Phu Quat Railroad Bridge over stream	S
25X1	18	Dia Thuy Railroad Bridge SW over Khe Dua	U

Dia Thuy Railroad Bridge NW over

Qui Vinh Railroad Bridge No. 1 over

Qui Vinh Railroad Bridge No. 2 over

S

Ū

U

18

19

19

Khe Dua

Song Hoang Mai

Song Hoang Mai

25X1

25X1

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	DDI IMAGERY ANALYSIS STAFF 25X1	-	
	25/(1		
	Bridge Number and Name	Status	
19	Qui Vinh Railroad Bridge No. 3 over Song Hoang Mai	U	25X1
19	Qui Vinh Railroad Bridge No. 4 over Song Hoang Mai	s	25X1
21	Long Ngoc Railroad and Highway Bridge over unknown barrier	S	25X1
22	Dong Khe Railroad Bridge over	S	25X1
23	Dien Chau Railroad Bridge over Song Bang	υ	25X1
23	Dien Chau Railroad Bridge E over Song Bang	S	25X1
24	Da Phuc Railroad Bridge over Intermittent Waterway	s	25X1
25	Tam De Railroad and Highway Bridge over Song Cua Lo	υ	25X1
25	Tam Da Railroad By-Pass Bridge	s	
26	Trai Hoi Railroad and Highway Bridge over Ngan Sau	υ	25X1
27	Xom Hoai Railroad and Highway Bridge over Rao No	U	25X1
29	Dong Bai Railroad Bridge overq Song Tien	U	25X1
29	Dong Bai Railroad By-Pass Bridge N over Song Tien	S	25X1
30	La Khe Thon Railroad Bridge over Song Tien	υ	25X1

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25X1			
		ddi imagery analysis staff 25X1	
			\neg
		Bridge Number and Name	Status
25X1	30	La Khe Thon Highway Bridge over Song Tien	S
25X1	31	Bai Duc Thon Railroad Bridge over Khe Ba Giang	Ŭ
25X1	31	Bai Duc Thon Railroad Bridge S over Khe Ba Giang	S
25X1	32	Xom Khe Railroad Bridge over Khe Net	U
	32	Xom Khe Railroad Bridge By-Pass over Khe Net	Ū
25X1	33	Kim Lu Xa Railroad Bridge over Khe Danh	S
25X1	35	Thi Long Railroad Bridge SE over	S
	35	Thi Long Railroad Bridge S By-Pass	S
25X1	36	Tho Trang Railroad Bridge over	S
25X1	38	Phuc Trach Railroad Bridge over Khe Ac	S
25X1	39	Quang Te Railroad Bridge over Khe Hac Giang	U
25X1	40	Qui My Railroad Bridge over	S
	41	Tu My Railroad Bridge	S
	42	Trai Tran Xom Railroad	s

Dong Ca Thon Railroad and Highway Bridge over Cai Khe

S

25X1

43

Approved For Release 2002/19/27 RETA-RDP78105161A0015 9907994277155							
			25X1				
	DDI IMAGERY ANALYSIS STAFF						
	25X1						
	Bridge Number and Name	Status					
44	Kieu Moc Phuong Railroad Bridge W	S	25X1				
45	Phu Cu Railroad Bridge N over stream	Ū	25X1				
45	Phu Cu Railroad By-Pass Bridge	S					
47	Yen Hoi Ha Railroad Bridge over Highway	S	25X1				
48	Sai Thon Railroad Bridge N over stream	S	25X1				
49	Nap Bang Railroad Bridge over stream	S	25X1				

^{*} All data is compiled from photography
Symbols: S - serviceable, U - unserviceable

25X1

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 1: Hanoi/Dong Hoi Rail Line

NAME

: Van Dien Probable POL Transshipment Point

BE

: NA

COORDINATES

: 20 57N - 105 51E, WJ 881158

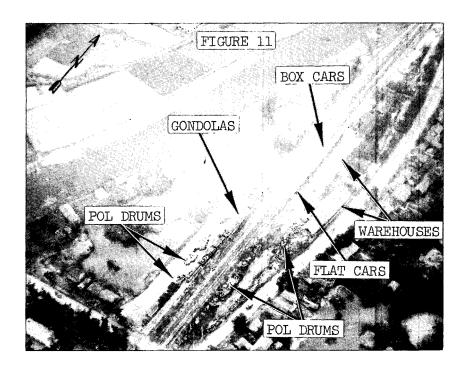
25X1

PHOTO REFERENCE

MAP REFERENCE :

: JOG (A) 1501, NF 48-15

A probable POL transshipment point was observed three nm southeast of Ha Dong on the Hanoi/Dong Hoi Rail Line. The transshipment point consists of a three track rail yard and two large warehouses. Seven gondolas carrying POL drums, four box cars, and two flat cars with possible civil defense shelters were observed in the yard. Several groups of POL drums were noted on either side of the yard.



<u> </u>	= '
	25X ²
DDI IMAGERY ANALYSIS STAFF	_

ITEM OF INTEREST NO. 2: Hanoi/Dong Hoi Rail Line

NAME : Trong Quang Tien RR Bridge

BE 25X1

COORDINATES : 19 37N - 105 42E, WE 740696

PHOTO REFERENCE

MAP REFERENCE : JOG (A) 1501, NE 48-3

The main bridge has been repaired and is now a serviceable three span deck, beam bridge. The previously serviceable by-pass No. 1 is unserviceable as is by-pass No. 2.



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DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 3: Hanoi/Dong Hoi Rail Line

NAME

: Xom Khe RR By-Pass No. 2

BE

: NA

COORDINATES

: 17 58N - 105 56E, WJ 987978

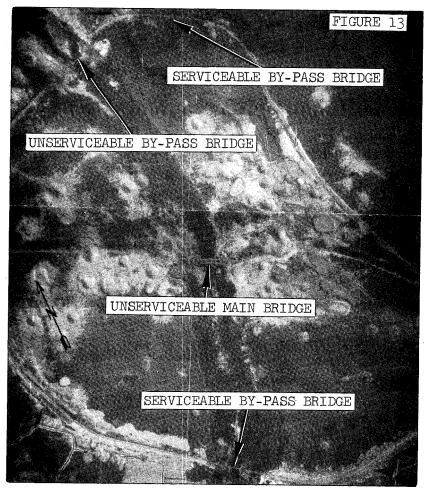
25X1

PHOTO REFERENCE

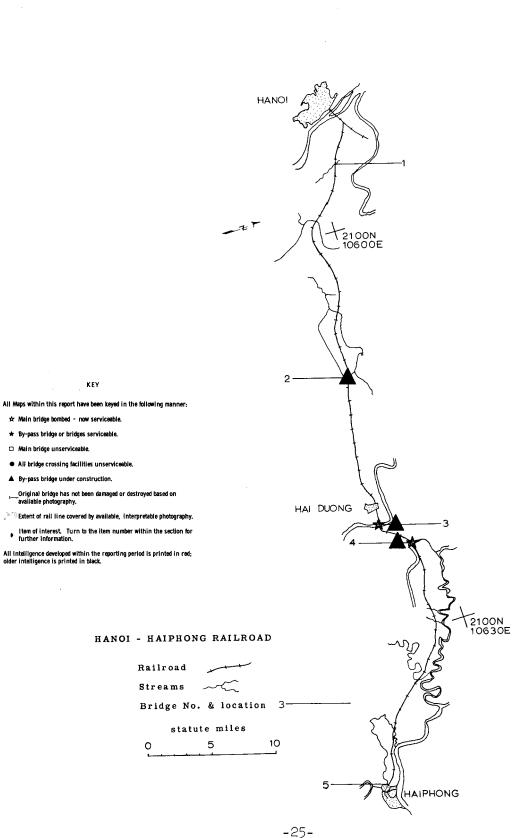
MAP REFERENCE

: JOG (A) 1501, NE 48-11

A new by-pass bridge has been completed and is serviceable. It is located approximately 1,050 feet south of the main bridge Although the bridge is serviceable, track has not yet been laid on the southwest approach. The previously reported by-pass bridge remains unserviceable.



PIR 77155 FIGURE 14



Railroad

KEY All Maps within this report have been keyed in the following manner:

,__Original bridge has not been damaged or destroyed based on available photography.

☆ Main bridge bombed - now serviceable. igspace By-pass bridge or bridges serviceable.

 All bridge crossing facilities unserviceable. ▲ By-pass bridge under construction.

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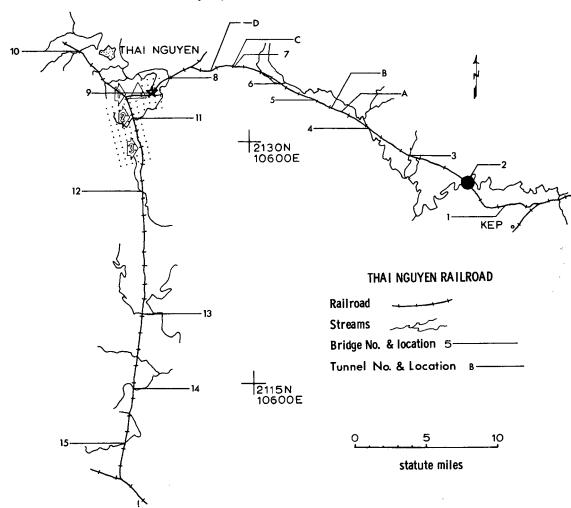
KEY

PIR 77155 FIGURE 15

All Maps within this report have been keyed in the following manner:

- ★ Main bridge bombed now serviceable.
- ★ By-pass bridge or bridges serviceable.
- Main bridge unserviceable.
- All bridge crossing facilities unserviceable.
- ▲ By-pass bridge under construction.
- ,__Original bridge has not been damaged or destroyed based on available photography.
- Extent of rail line covered by available, interpretable photography.
- $\mbox{\Large I}$ Item of interest. Turn to the item number within the section for further information.

All intelligence developed within the reporting period is printed in red; older intelligence is printed in black.



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	DDI IMAGERY ANALYSIS STAFF		207
•	DELIMAGENT ANALISIS STAFF		
	STATUS OF PREVIOUSLY DAMAGED/DESTROYED BRIDGES THAI NGUYEN RAIL LINE		
	Bridge Number and Name	Status	
2	Dong Muc Railroad Bridge over Song Thuong	U	25)
0			
9	Lang Lau Railroad Bridge over Song Cau	S	25)
		ı	
	25X1		
-			
o			
* Al	l data is compiled from photography		25
Sy	mbols: S - serviceable, U - unserviceable		

25X1

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 1: Thai Nguyen Rail Line

NAME

: Lang Lau RR By-Pass Under Construction over

Song Cau

BE

: NA

COORDINATES

: 21 33N - 105 54E, WJ 927834

25X1

PHOTO REFERENCE

MAP REFERENCE

: JOG (A) 1501, NF 48-11

A by-pass bridge under construction was observed approximately 1,700 feet southeast of the main bridge. The by-pass roadbed has been completed from the rail line on the northeast side of the main bridge to the river at the construction site. No piers or abutments were observed at the site. The by-pass roadbed on the southwest side of the main bridge is still being extented toward the construction site.



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25X1

DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 2: Thai Nguyen Rail Line

NAME

: Extension of Dual Gauge Track

BE

: NA

COORDINATES

: 21 32N - 105 52E

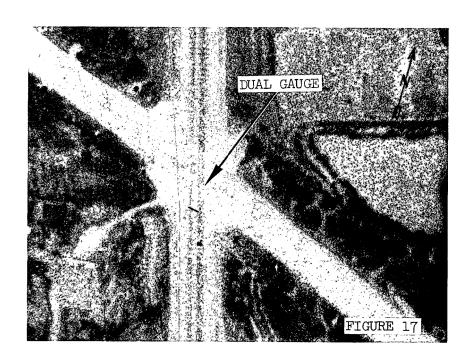
PHOTO REFERENCE

25X1

MAP REFERENCE

: JOG (A) 1501, NF 48-11

Dual (i.e., standard and meter gauge) track has now been observed 1.8 nm south of Thai Nguyen with the addition of a 0.9 nm southward extension of photographically confirmed dual gauge track. It is probable that dual gauge track extends beyond this point.



DDI IMAGERY ANALYSIS STAFF

ITEM OF INTEREST NO. 3: Thai Nguyen Rail Line

NAME : New Rail Siding Under Construction

BE : NA

COORDINATES : 21 29N - 105 53E, WJ 914754

25X1 PHOTO REFERENCE

MAP REFERENCE : JOG (A) 1501, NF 48-11

A new rail siding under construction is located 5.5 nm southeast of Thai Nguyen on the Thai Nguyen Rail Line. The siding consists of three spurs, two with a single track and one with double tracks. The siding appears in the late stages of construction. The roadbed has been completed and the track is in on one spur and nearing completion on the others. At this time the siding appears serviceable to a limited extent.

Four trucks and a probable crane were observed operating in the area.

