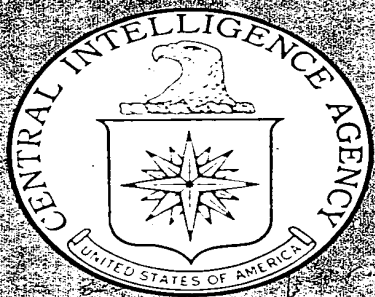


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IMAGERY  
ANALYSIS  
DIVISION

PIR

PHOTOGRAPHIC INTELLIGENCE REPORT

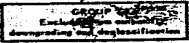
REGIONAL LIQUID STORAGE  
INSTALLATIONS IN COMMUNIST  
CHINA

Declass Review by NIMA/DOD

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CIA/PIR 61037  
TCS 12655/65  
DATE October 1965  
COPY 8  
PAGES 10

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CIA/PIR-61037

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REGIONAL LIQUID STORAGE INSTALLATIONS

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TCS 12655/65  
CIA/PIR-61037

REGIONAL LIQUID STORAGE INSTALLATIONS  
IN COMMUNIST CHINA

Nineteen unusual rail-served liquid storage installations, including six that are currently under construction, have been located in Communist China (Figure 1). These installations have similar components and are all strategically located in relatively isolated areas at the end of 2-3 mile long rail spurs which were constructed specifically for and serve only the installation.

The installations appear to be military in nature and may be regional collection and distribution centers for a type of liquid storage. Some of these sites are less than ten miles from large military barracks and training areas. A typical completed installation (Figure 2) contains 20 dome-covered, earth-mounded, semi-buried, tank-like structures, approximately 75 feet in diameter and 40 feet deep; a three-track wide, revetted, rail transloading facility; at least one large earth-covered bunker, approximately 200 feet by 100 feet; two or three warehouse-type buildings, each approximately 200 feet by 100 feet; and a support area of 35-50 buildings, including barracks. The entire area is secured with single or double fencing.

These installations resemble POL storage areas, but they have several features that are not typical of known POL storage areas elsewhere in China.

(a) A hemispherical dome covers each tank-like structure. The sides of the tank are completely covered with earth approximately ten feet thick at the top, sloping to 20-25 feet thick at the bottom, so that each tank-like structure resembles a giant igloo (Figure 3).

(b) The structures are spaced in an apparently random pattern from 100 to 500 feet apart, possibly to take advantage of ravine spurs and natural terrain features that provide additional security and protection.

(c) An improved road leads to each individual tank-like structure, which has a cave-like entrance large enough for small vehicles.

(d) Each structure appears to have seven ventilators; one on the top in the center of the dome, and six spaced around the edges.

(e) The structures are usually built along the sides of ravines at

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CIA IMAGERY ANALYSIS DIVISION

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elevations considerably higher than the railhead facility.

(f) Locating these installations in some of these isolated areas required the construction of tunnels and bridges. The construction time of approximately 3-4 years and the engineering and construction costs appear to be abnormally, and unnecessarily high for conventional POL storage areas.

25X1D

The following eleven installations appeared to be operational when they were first photographed during [REDACTED] period. However, new buildings and additional construction activity has been observed at most of these installations from [REDACTED].

25X1D

Chieh-Hsiu (36-59N 111-55E), 60 nautical miles southwest of Tai-Yuan  
Chu-Chou (27-49N 113-13E), 25 nautical miles southeast of Chang-Sha  
Chueh-Shan (32-47N 114-01E), 135 nautical miles north of Wu-Han  
Hsin-Pao-An (40-27N 115-21E), 50 nautical miles northwest of Pei-Ping  
Huo-Lu (38-03N 114-17E), 10 nautical miles west of Shi-Men  
Kang-Chuang (40-19N 115-54E), 25 nautical miles northwest of Pei-Ping  
Liu-Lin (31-58N 114-06E), 85 nautical miles north of Wu-Han  
Tung-Hsiang (28-10N 116-38E), 50 nautical miles southeast of Nan-Chang  
Yang-Kao (40-20N 113-41E), 25 nautical miles northeast of Ta-Tung  
Yen-Shih (34-44N 112-55E), 25 nautical miles east of Lo-Yang  
Yung-Fu (24-49N 110-00E), 45 nautical miles northeast of Liu-Chow

25X1D

The following two installations were in the early stages of construction when they were first photographed in [REDACTED]. They appeared to be operational in [REDACTED].

25X1D

Wu-Wei (37-59N 102-30E), 6 nautical miles northwest of Wu-Wei  
Yang-Lin (25-14N 103-06E), 25 nautical miles northeast of Kun-Ming

25X1D

25X1D

The following six installations began construction during [REDACTED] and as of [REDACTED] were still actively under construction at various stages of completion:

Nan-Chang (31-04N 118-07E), 25 nautical miles southwest of Wu-Hu  
Pai-Shih-Tu (25-25N 113-04E), 50 nautical miles northwest of Chu-Chiang  
Shao-Wu (27-26N 117-27E), 60 nautical miles northwest of Nan-Ping  
Ta-Jung-Chiang (25-35N 110-32E), 20 nautical miles northeast of Kwei-Lin  
Te-Po-Ssu (46-27N 121-18E), 75 nautical miles northwest of Tao-An  
Tung-Shan (41-58N 124-32E), 50 nautical miles east-northeast of Shen-Yang

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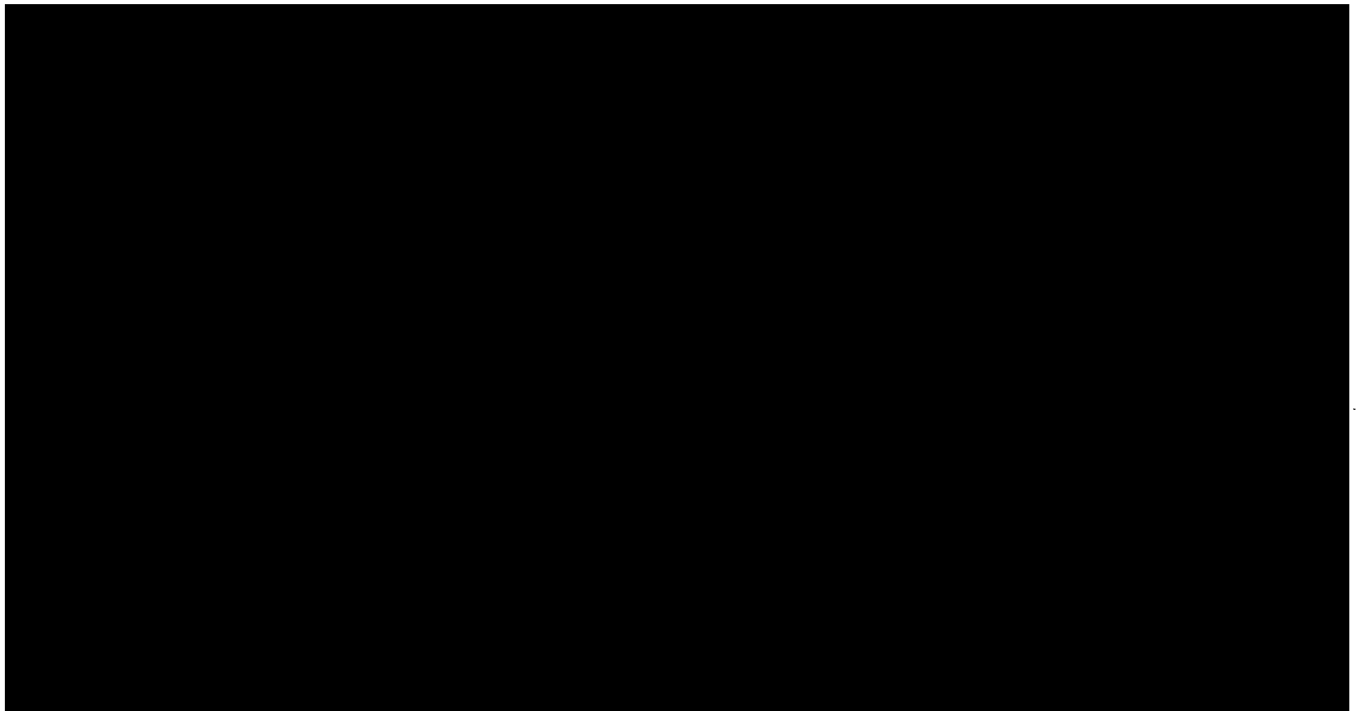
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CIA/PIR-61037

Photographs and map locations of the known nineteen installations, arranged in alphabetical order, are shown on the following pages. A detailed search of available photography could possibly reveal the locations of several more.

A few of these installations are identified and located for the first time in this report, but most of them have been previously reported as possible underground POL storage, explosive storage, or mining activity. Whatever their function, it seems apparent that they are all similar, represent a major current construction effort, and may have significant military importance.

### REFERENCES

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25X1D

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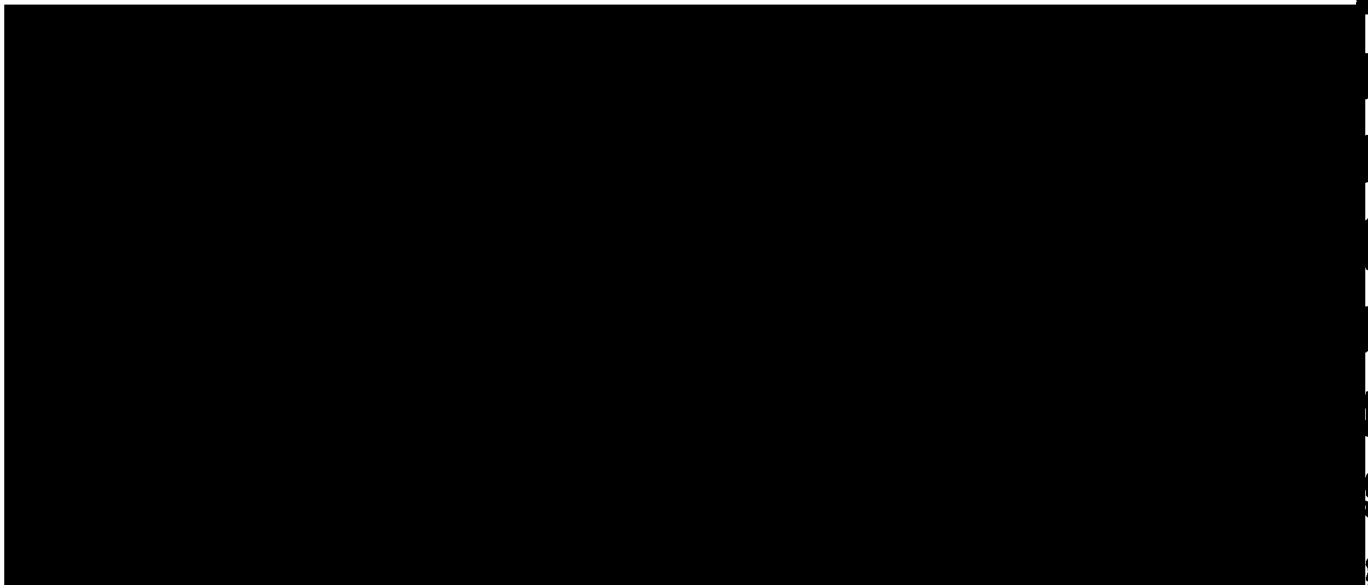
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25X1D



MAPS and CHARTS

Chieh-Hsiu

ACIC. US Air Target Chart, Series 200, Sheet 0382-18AL, Scale 1:200, 000, 2nd edition, April 1961 (SECRET)

Chu-Chou

ACIC. US Air Target Chart, Series 200, Sheet 0498-1AL, Scale 1:200, 000, 2nd edition, September 1960 (SECRET)

Chuen-Shan

ACIC. US Air Target Chart, Series 200, Sheet 0385-24HL, Scale 1:200, 000, 2nd edition, June 1963 (SECRET)

Fan-Chang

ACIC. US Air Target Chart, Series 200, Sheet 0493-9A, Scale 1:200, 000, 1st edition, March 1959 (SECRET)

-8-

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Pai-Shih-Tu

ACIC., US Air Target Chart, Series 200, Sheet 0498-16HL, Scale 1:200, 000, 2nd edition, March 1964 (SECRET)

Hsin-Pao-An

ACIC. US Air Target Chart, Series 200, Sheet 0289-21AL, Scale 1:200, 000, 4th edition, November 1962 (SECRET)

Huo-Lu

ACIC. US Air Target Chart, Series 200, Sheet 0382-14AL, Scale 1:200, 000, 2nd edition, February 1961 (SECRET)

Kang-Chuang

ACIC. US Air Target Chart, Series 200, Sheet 0289-21AL, Scale 1:200, 000, 4th edition, November 1962 (SECRET)

Liu-Lin

ACIC. US Air Target Chart, Series 100, Sheet 0385-8415-100A (Prov), Scale 1:100,000, 2nd edition (Prov), May 1957 (SECRET)

Shao-Wu

ACIC. US Air Target Chart, Series 200, Sheet 0498-4AL, Scale 1:200, 000, 1st edition, August 1960 (SECRET)

Ta-Jung-Chiang

ACIC. US Air Target Chart, Series 200, Sheet 0497-18 A, Scale 1:200, 000, 1st edition, February 1959 (SECRET)

Te-Po-Ssu

ACIC. US Air Target Chart, Series 200, Sheet 0284-9AL, Scale 1:200, 000, 1st edition, January 1960 (CONFIDENTIAL)

Tung-Hsiang

ACIC. US Air Target Chart, Series 200, Sheet 0493-23AL, Scale 1:200, 000, 2nd edition, November 1960 (SECRET)

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Tung-Shan

ACIC. US Air Target Chart, Series 200, Sheet 0290-11HL, Scale 1:200, 000, 3rd edition, December 1961 (SECRET)

Wu-Wei

ACIC. US Air Target Chart, Series 200, Sheet 0383-11HL, Scale 1:200, 000, 2nd edition, June 1964 (SECRET)

Yang-Kao

ACIC. US Air Target Chart, Series 200, Sheet 0288-25AL, Scale 1:200, 000, 1st edition, March 1960 (SECRET)

Yang-Lin

ACIC. US Air Target Chart, Series 200, Sheet 0496-17A, Scale 1:200, 000, 1st edition, September 1959 (SECRET)

Yen-Shih

ACIC. US Air Target Chart, Series 200, Sheet 0385-8AL, Scale 1:200, 000, 1st edition, April 1960 (SECRET)

Yung-Fu

ACIC. US Air Target Chart, Series 200, Sheet 0497-18A, Scale 1:200, 000, 1st edition, February 1959 (SECRET)

REQUIREMENT

DDP/277/65

CIA/IAD PROJECT

0182-6 (Partial)

-10-

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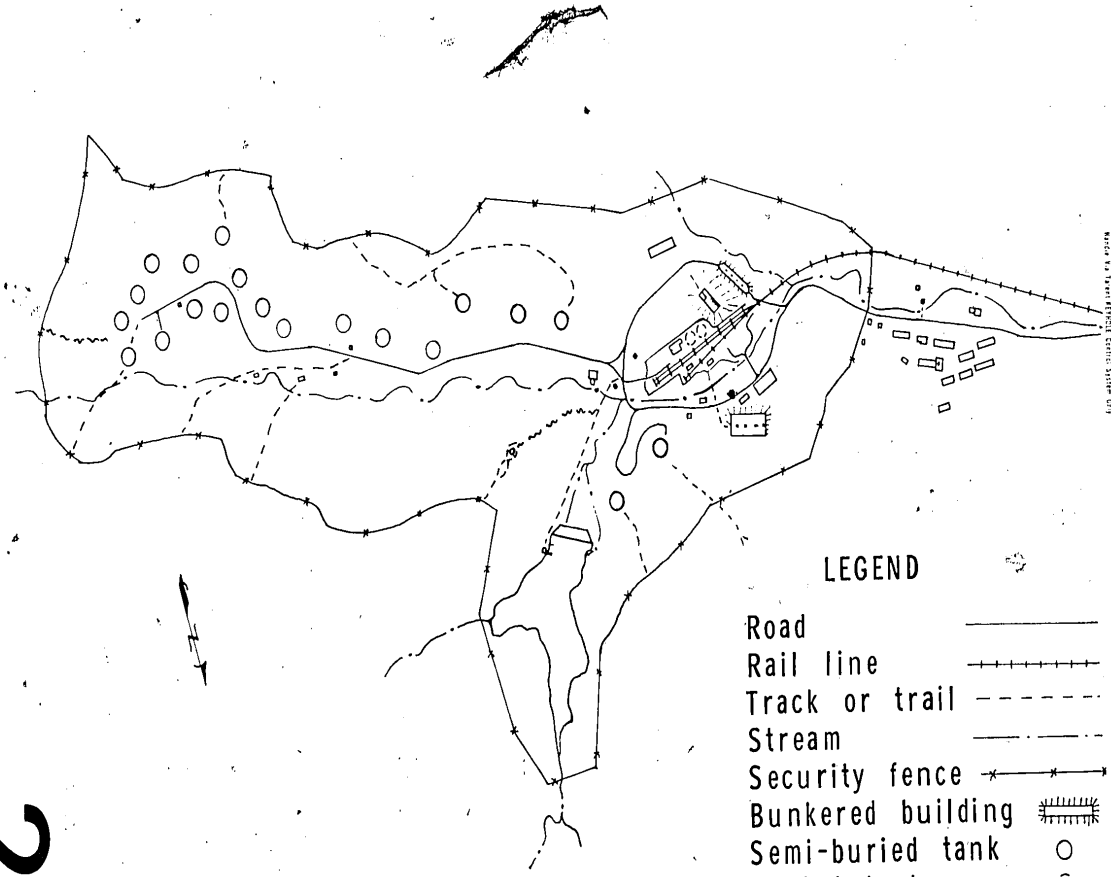
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# REGIONAL LIQUID STORAGE INSTALLATION

TUNG-HSIANG, CHINA  
28 10 N - 116 38 E

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TOP SECRET RUFF



## LEGEND

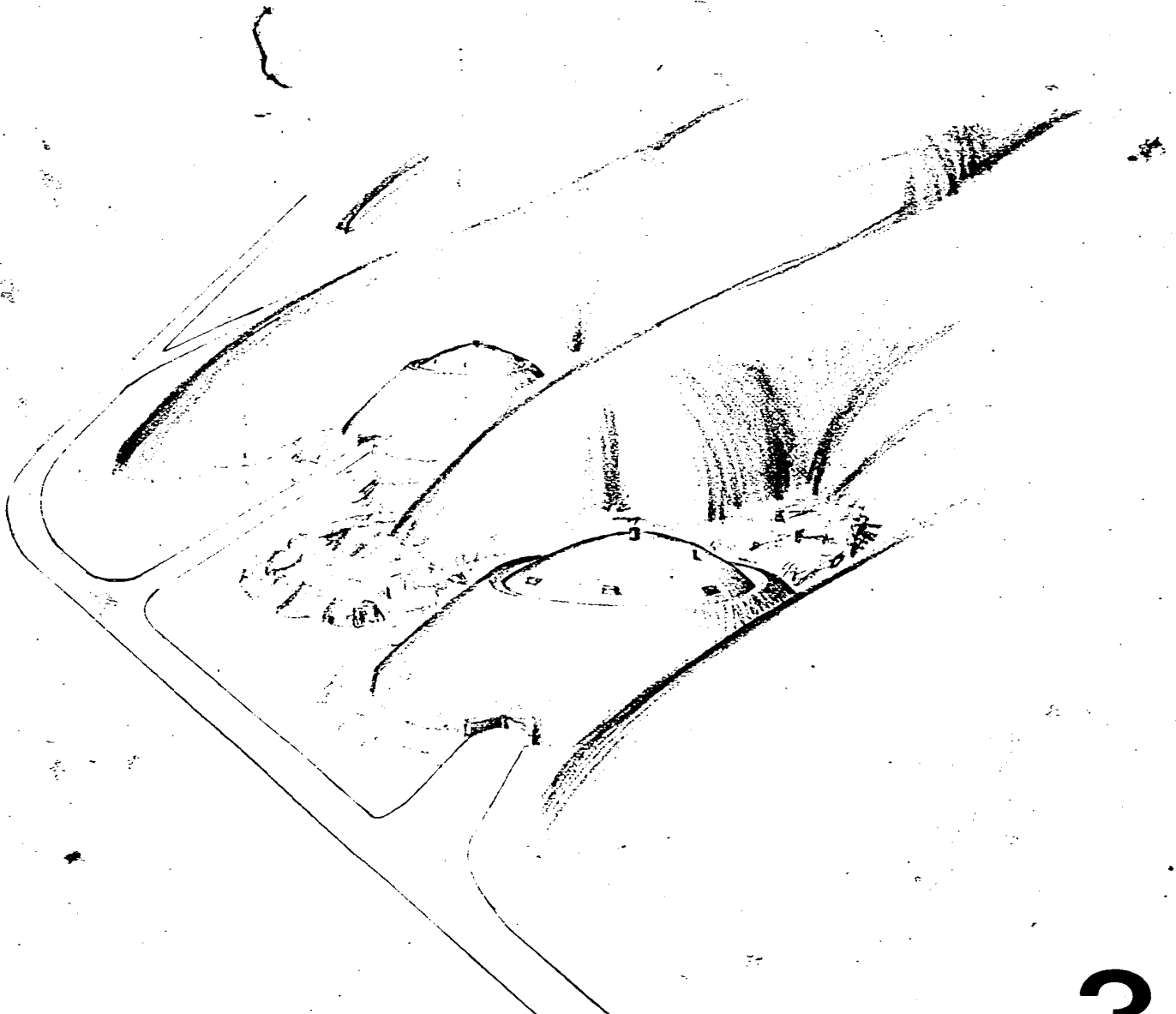
- Road
- Rail line
- Track or trail
- Stream
- Security fence
- Bunkered building
- Semi-buried tank
- Buried tank

TOS 12655/65  
CIA/PIR-610037

2

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SKETCH OF TYPICAL TANK-LIKE STRUCTURE

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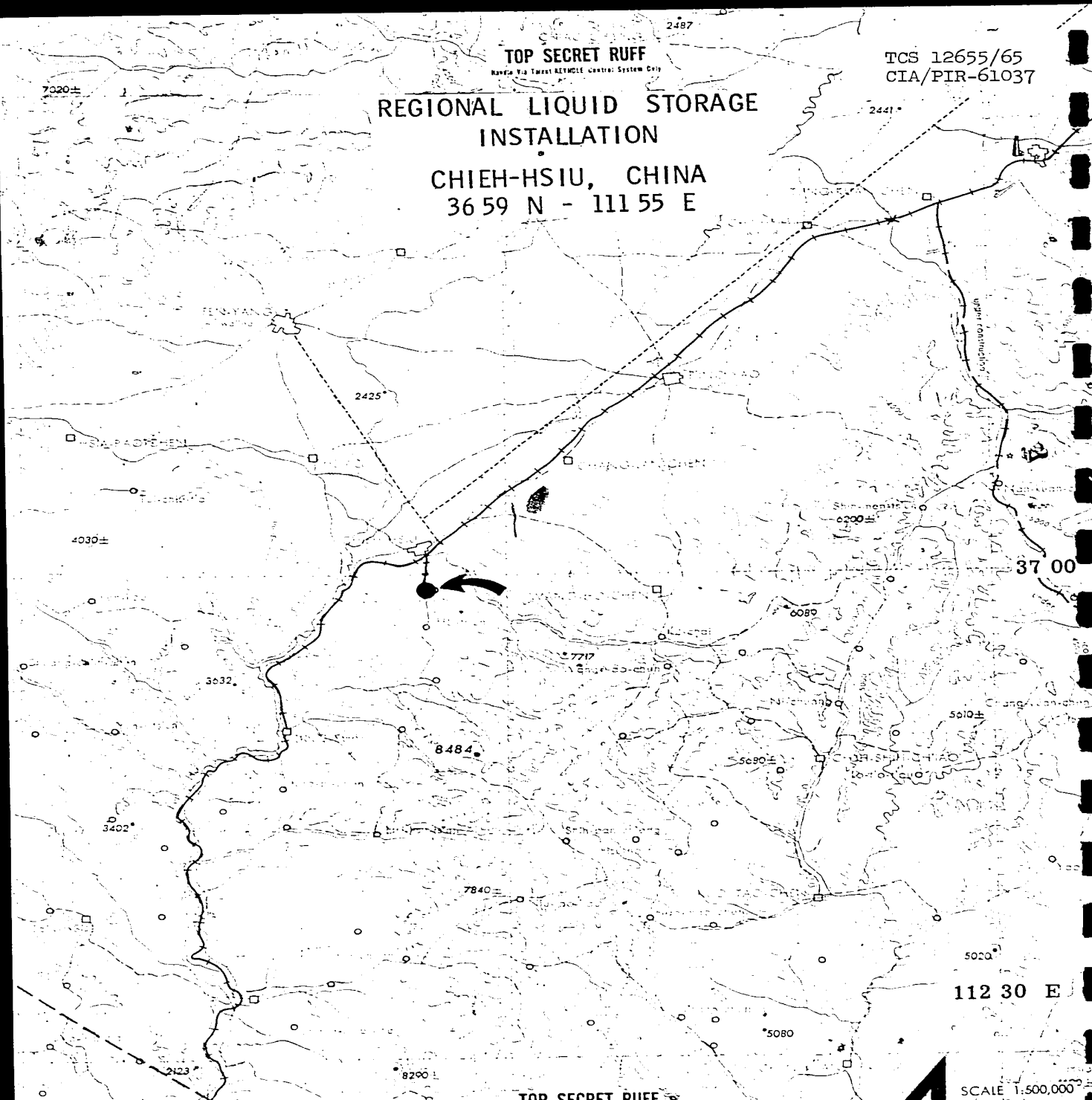
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# REGIONAL LIQUID STORAGE INSTALLATION

## CHIEH-HSIU, CHINA 36 59 N - 111 55 E



37 00 N

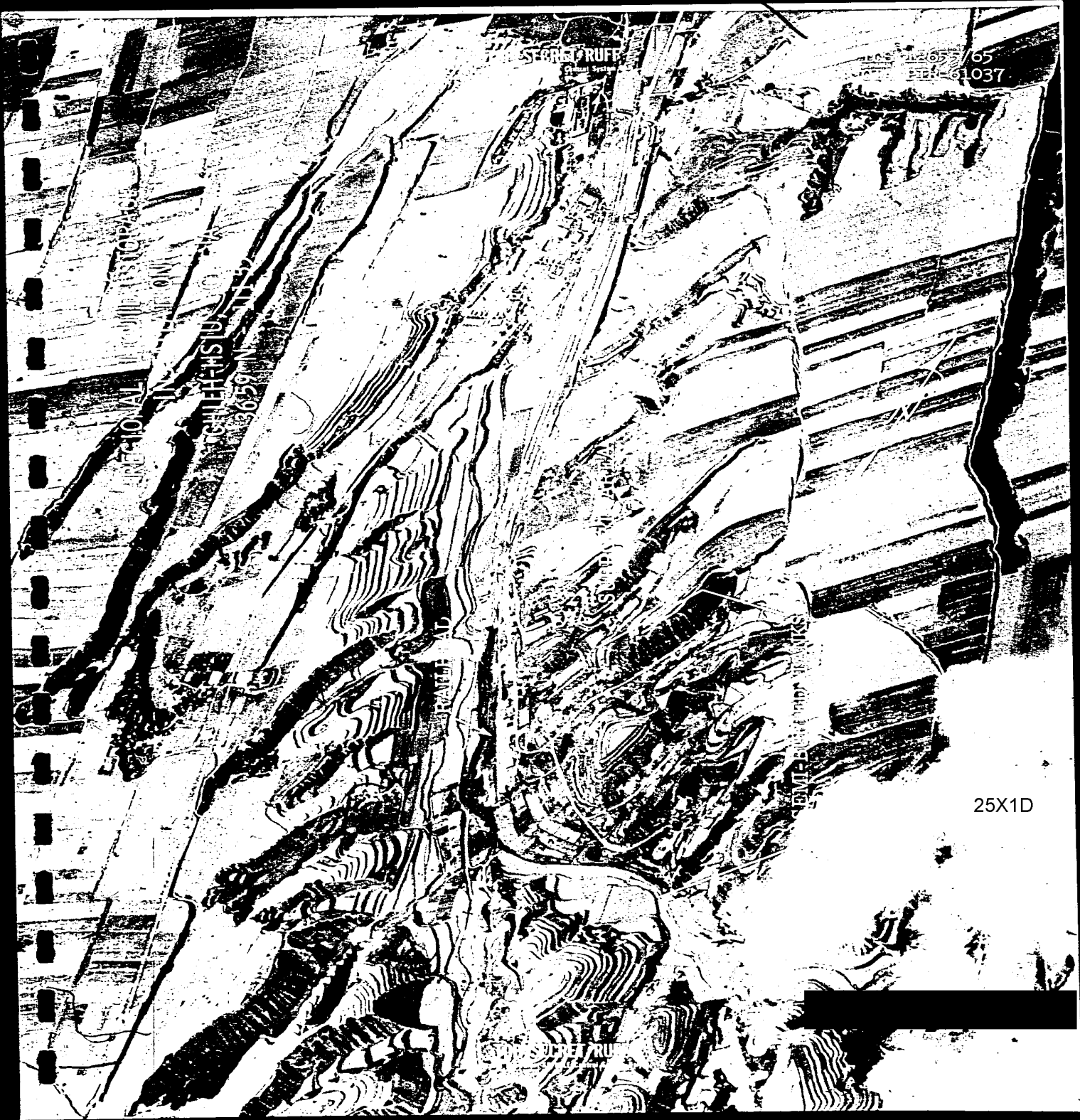
112 30 E

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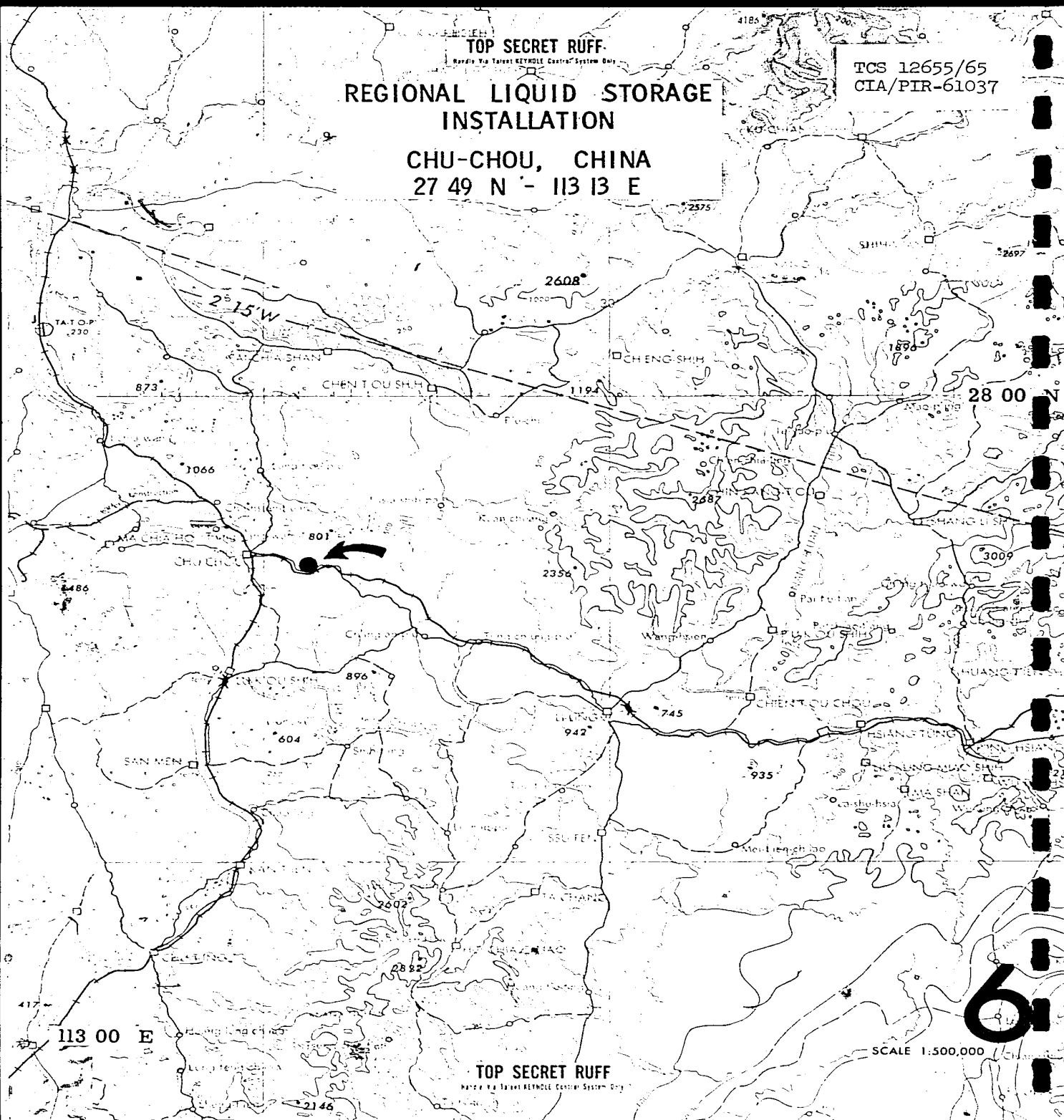
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CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

## CHU-CHOU, CHINA 27 49 N - 113 13 E



113 00 E

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25X1D



TOP SECRET RUFF

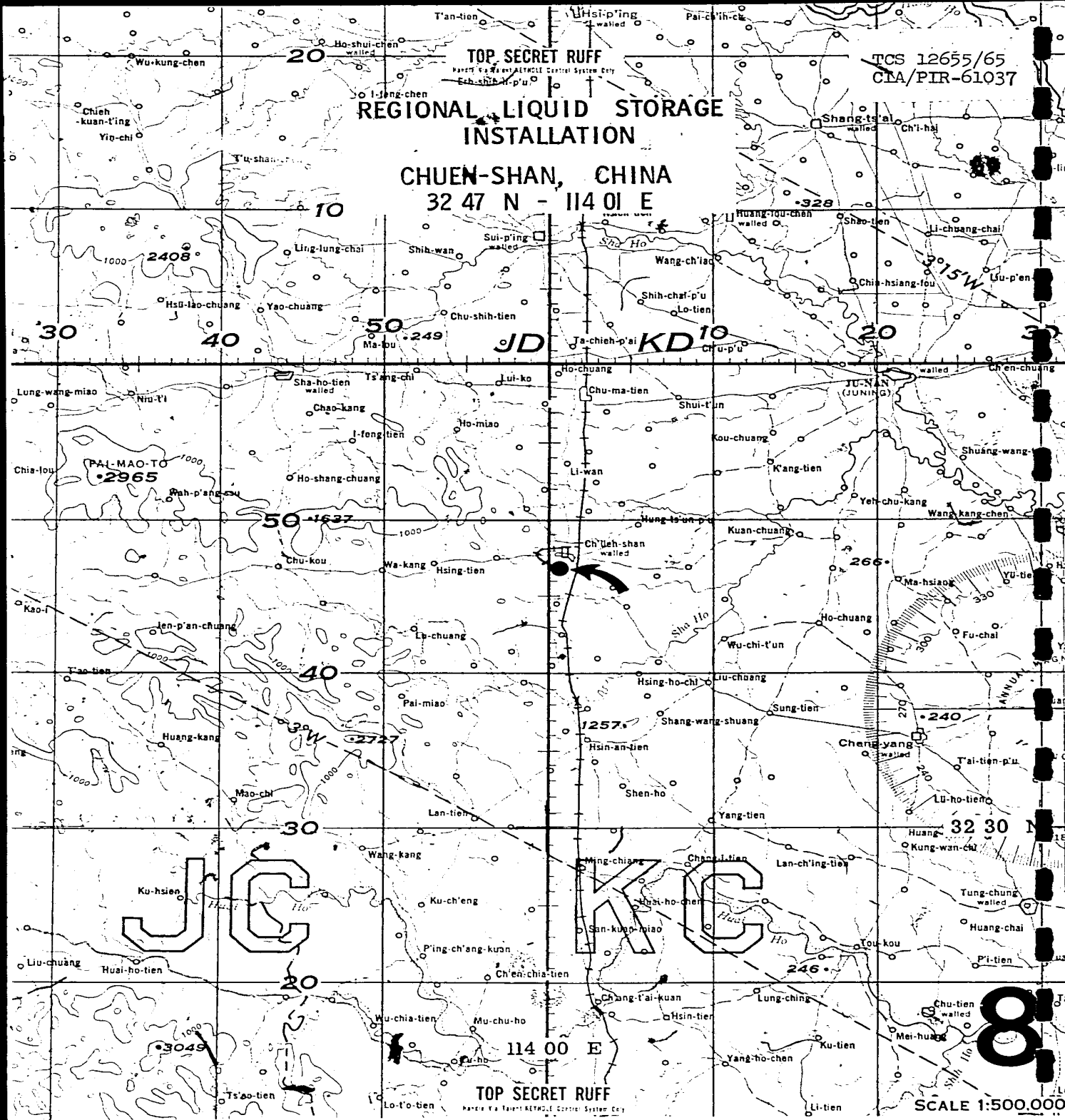
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# REGIONAL LIQUID STORAGE INSTALLATION

## CHUEN-SHAN, CHINA

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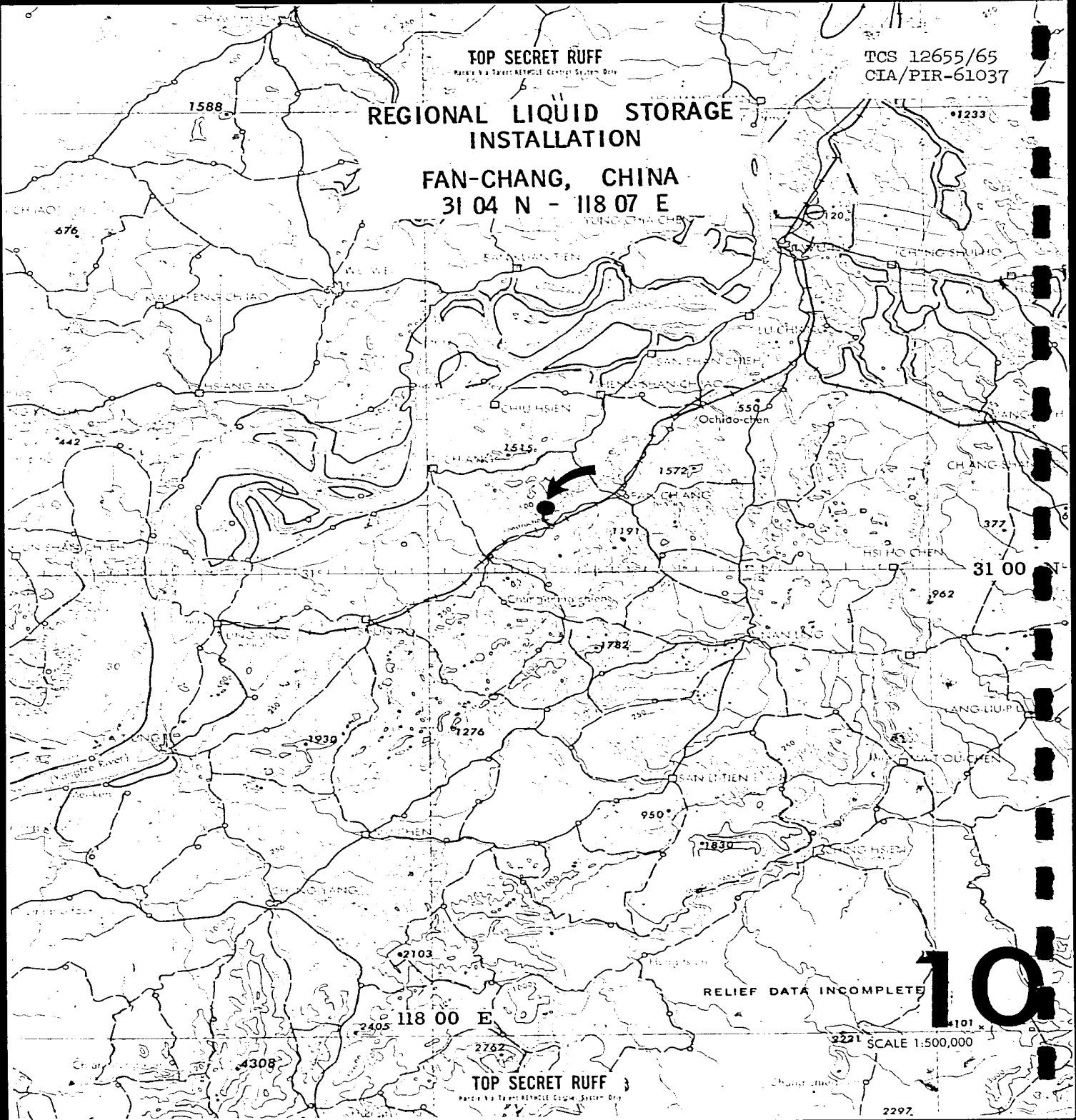
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CIA/PIR-61037

REGIONAL LIQUID STORAGE  
INSTALLATION

FAN-CHANG, CHINA  
31 04 N - 118 07 E



RELIEF DATA INCOMPLETE

118 00 E

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TOP SECRET RUFF

REGIONAL LIQUID STORAGE  
INSTALLATION

FAN-CHANG, CHINA  
31 04' N - 118 07' E



4100 1500 2000

4100 1500 2000

TANK AREA U/C

RAILROAD

SUPPORT AREA



Ap

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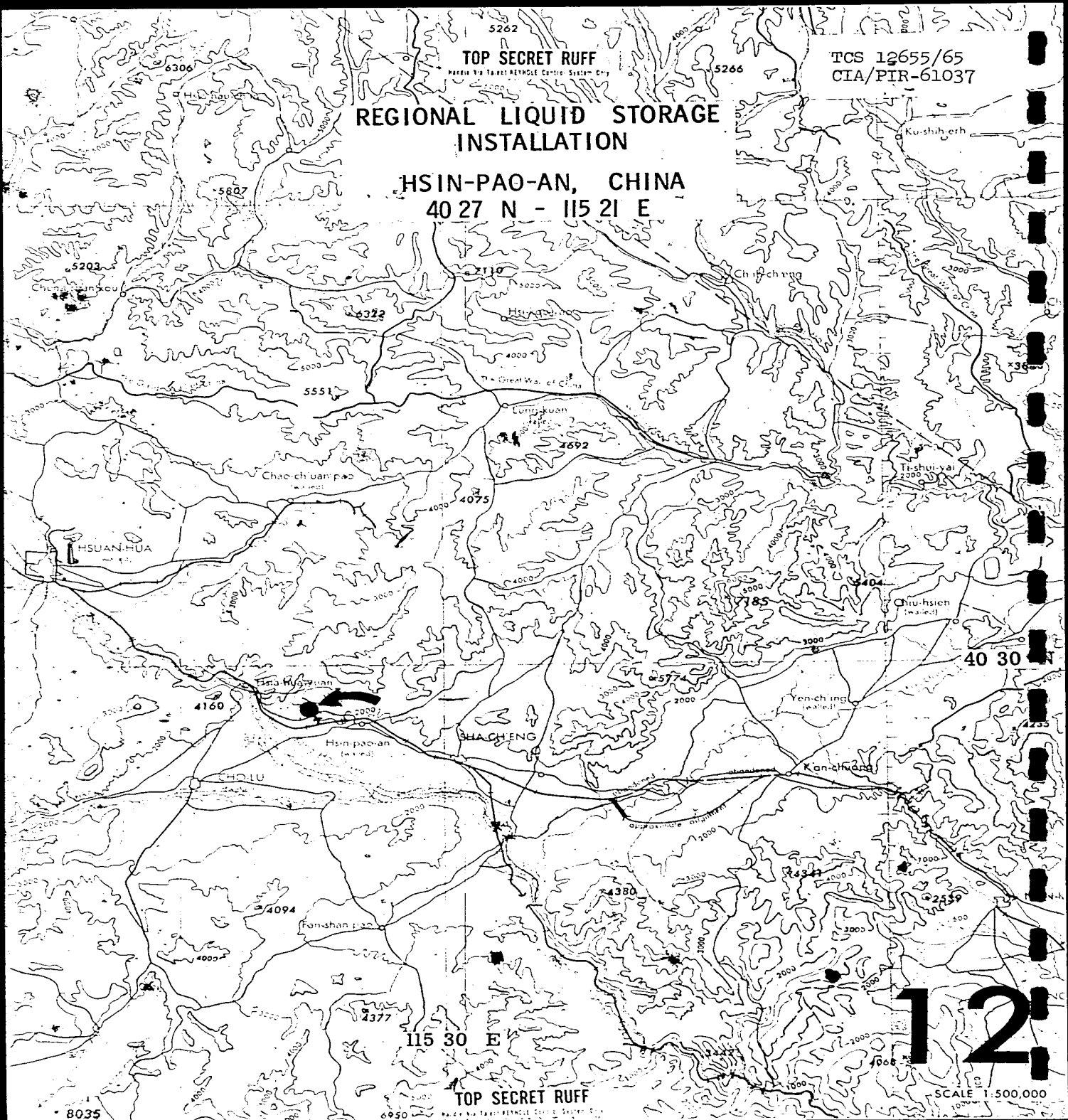
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# REGIONAL LIQUID STORAGE INSTALLATION

## HSIN-PAO-AN, CHINA 40 27 N - 115 21 E



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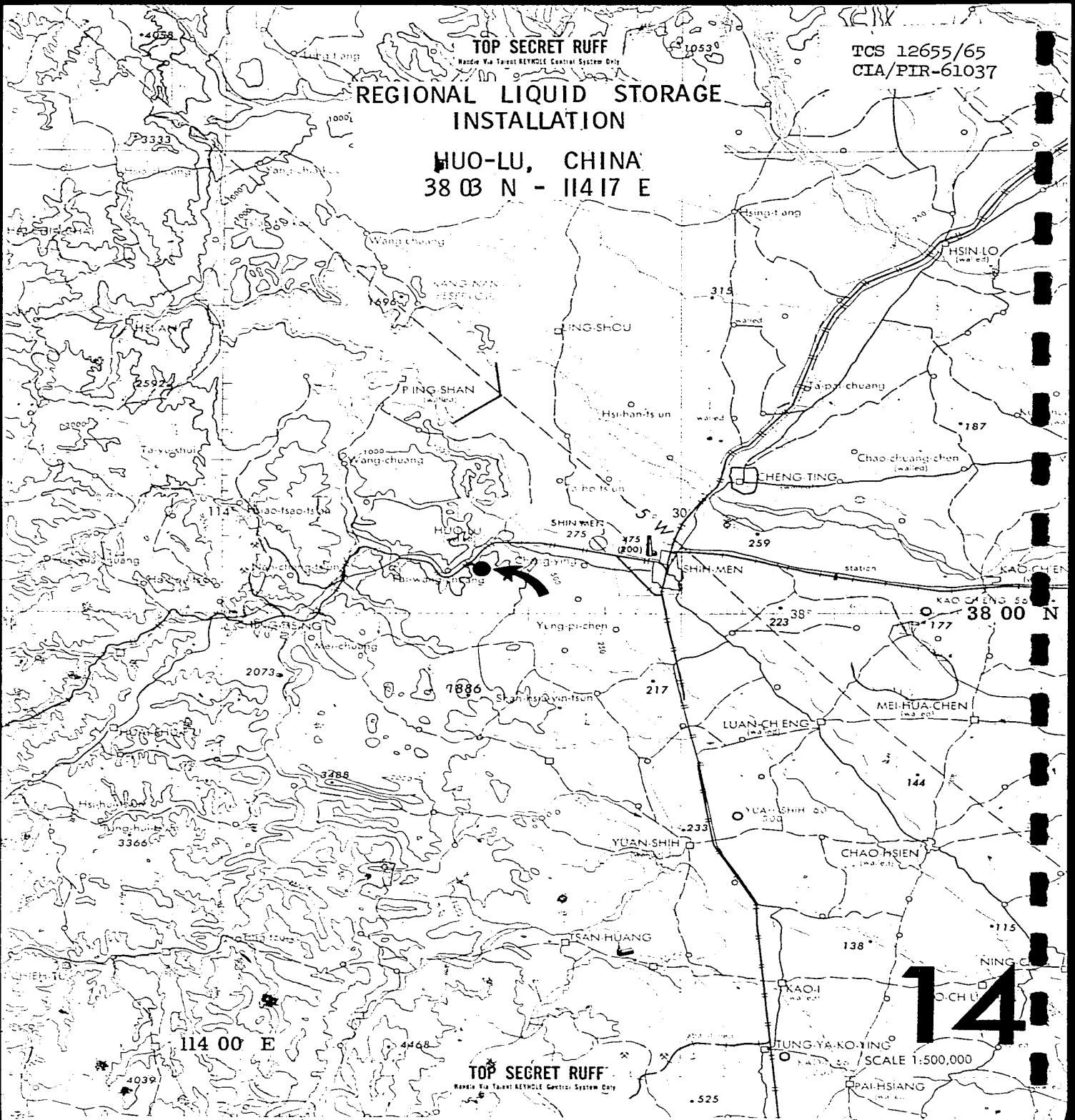
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Maped Via Target REYNOLDS Control System Data

TCS 12655/65  
CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

## HUO-LU, CHINA 38 03 N - 114 17 E



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Maped Via Target REYNOLDS Control System Data

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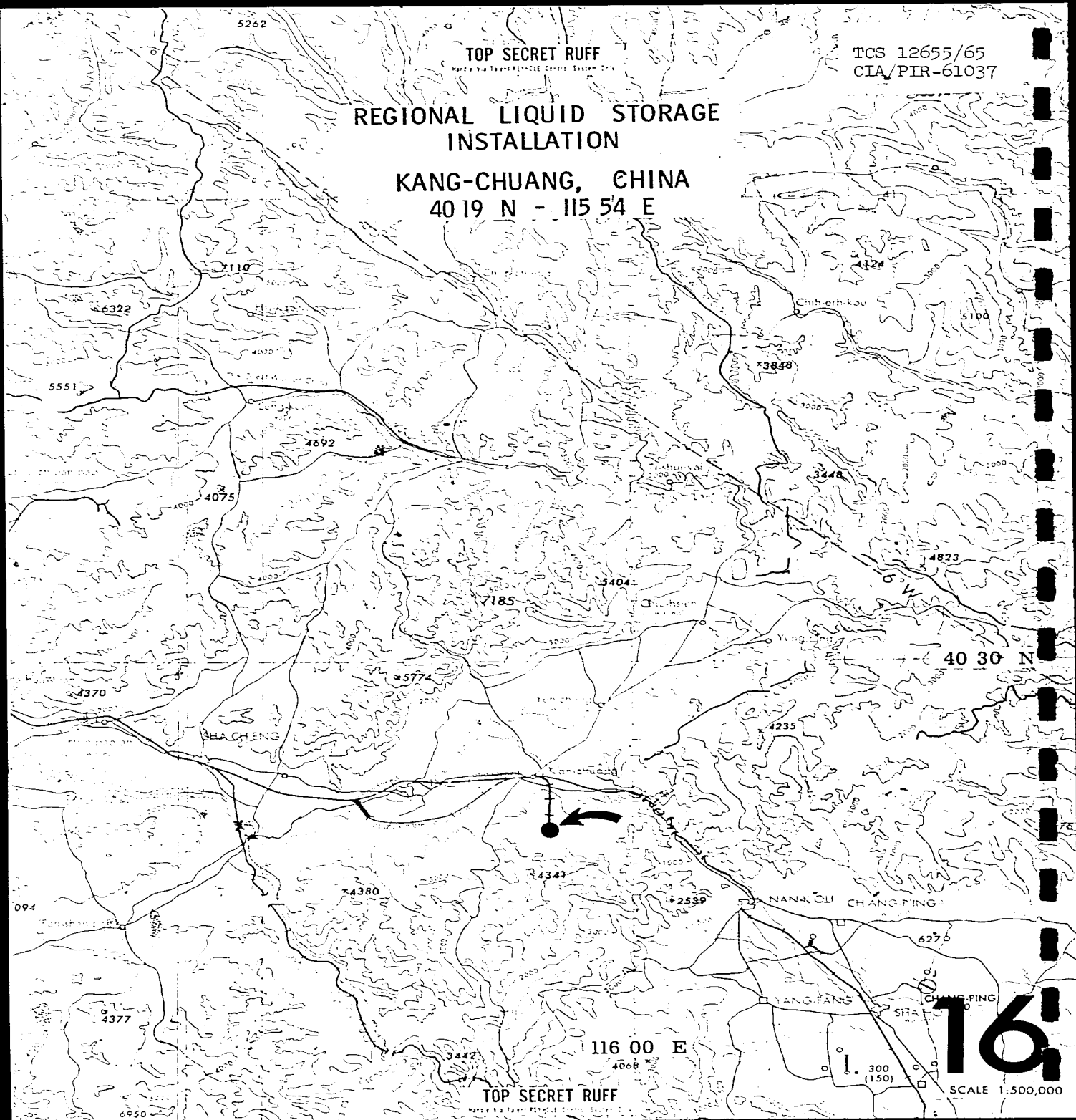


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CIA/PIR-61037

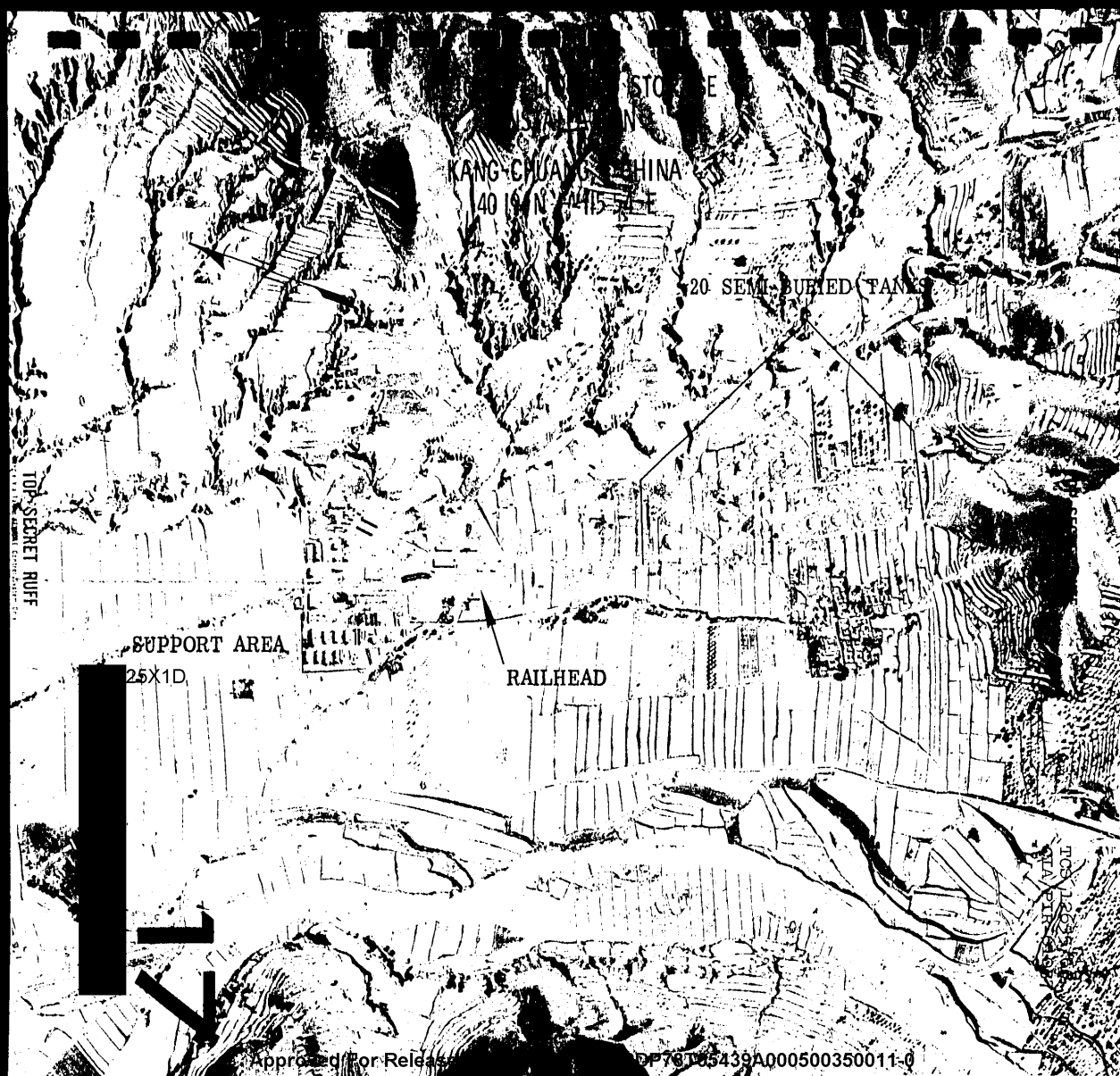
# REGIONAL LIQUID STORAGE INSTALLATION

## KANG-CHUANG, CHINA 40 19 N - 115 54 E



# 16

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STORAGE

KANG-CHUAN CHINA

40 16 N 115 57 E

20 SEMI-BURIED TANKS

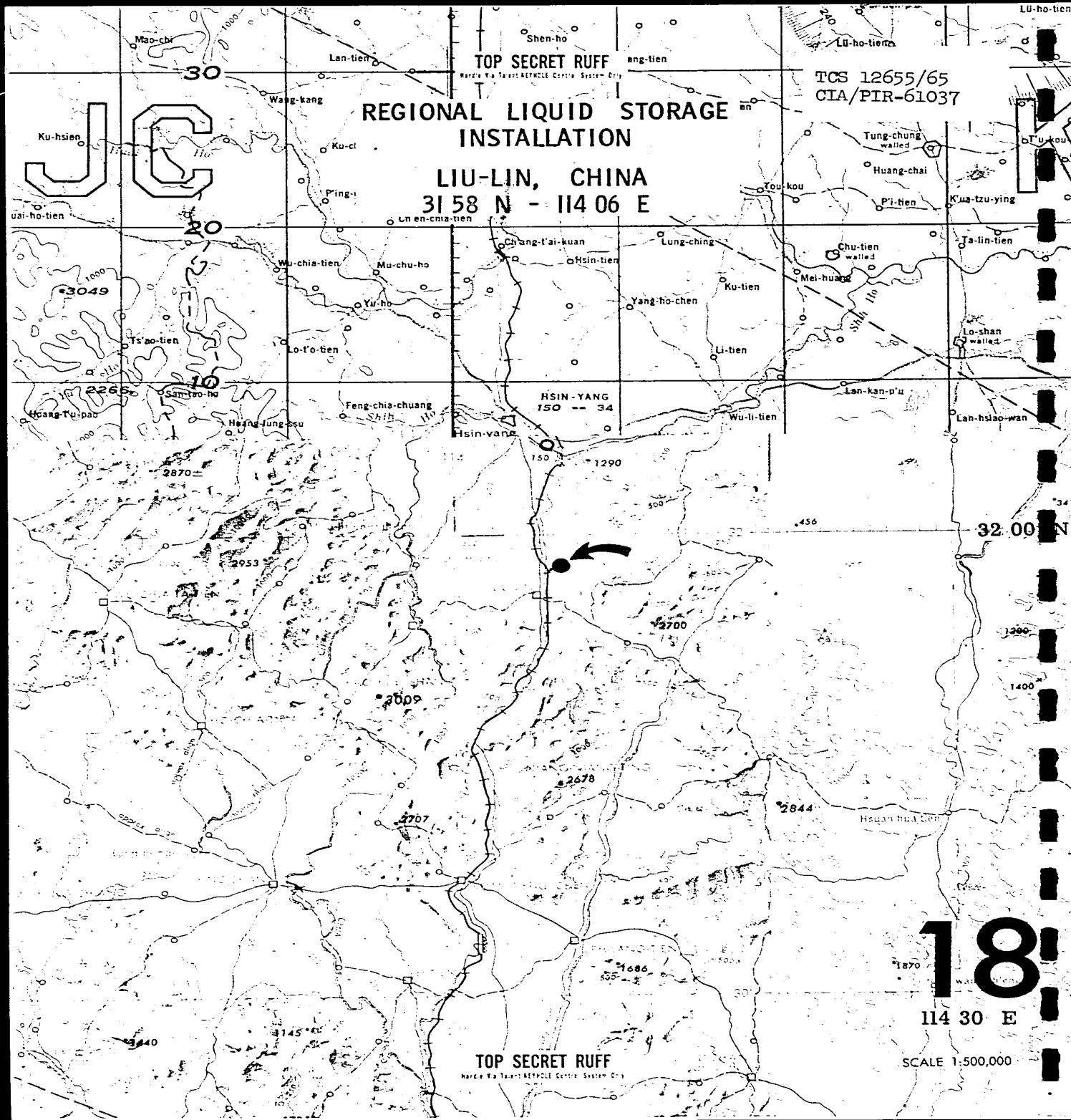
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SUPPORT AREA

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RAILHEAD

TOP SECRET RUFF



TOP SECRET RUFF  
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# REGIONAL LIQUID STORAGE INSTALLATION

## LIU-LIN, CHINA 31 58 N - 114 06 E

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CIA/PIR-61037

HSIN-YANG  
150 -- 34

# 18

114 30 E

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Hardy Via Teletype/SECURITY Center System Only

SCALE 1:500,000



REGIONAL LIQUID STORAGE  
INSTALLATION

LIU-LIN, CHINA  
31 58 N 114 06 E

20 SEMI-BURIED TANKS

RAILROAD

SUPPORT AREA

TOP SECRET RUMF

TOP SECRET RUMF

TOP SECRET RUMF

19

06 21 50 11 00

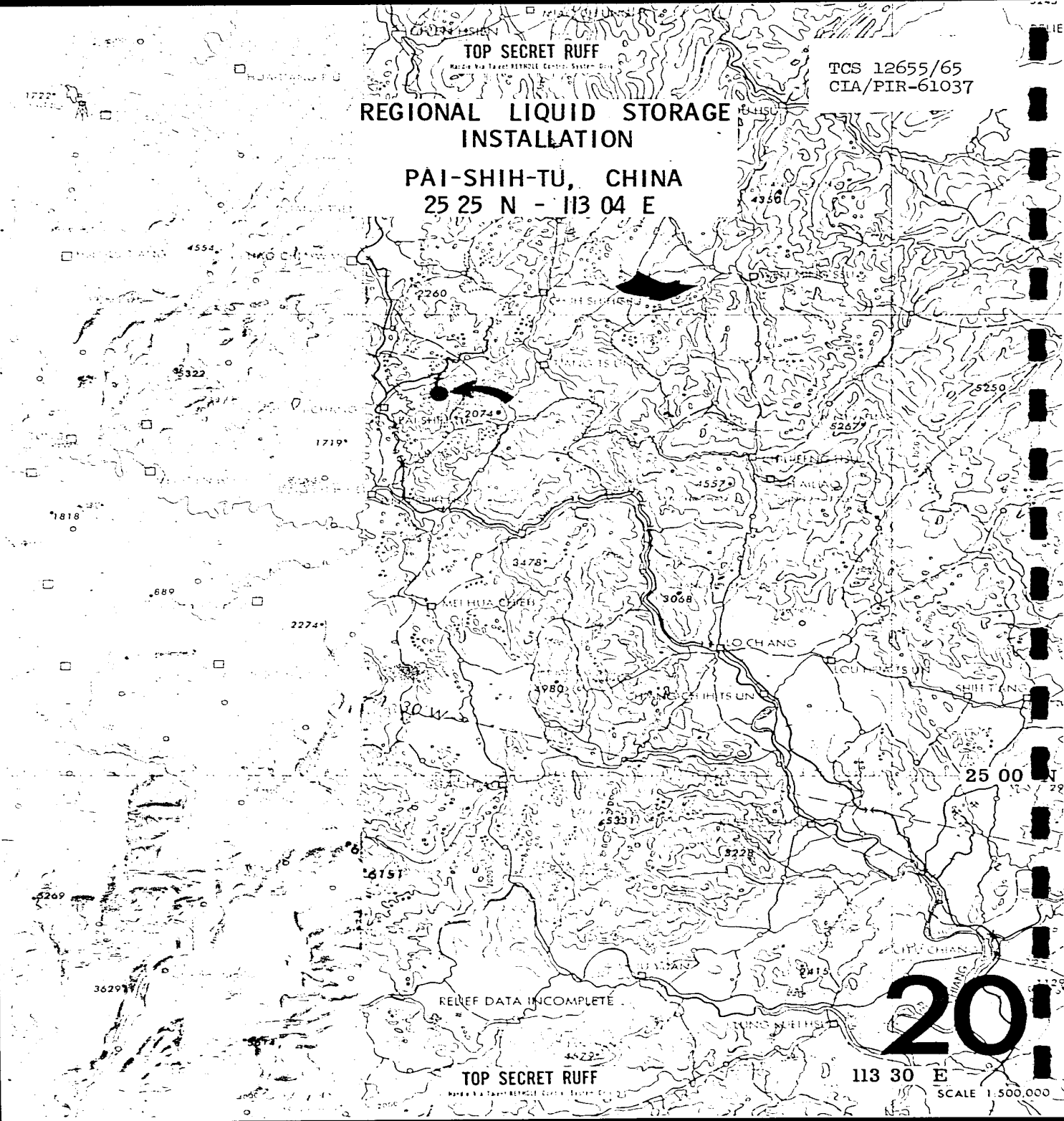
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# REGIONAL LIQUID STORAGE INSTALLATION

## PAI-SHIH-TU, CHINA 25 25 N - 113 04 E



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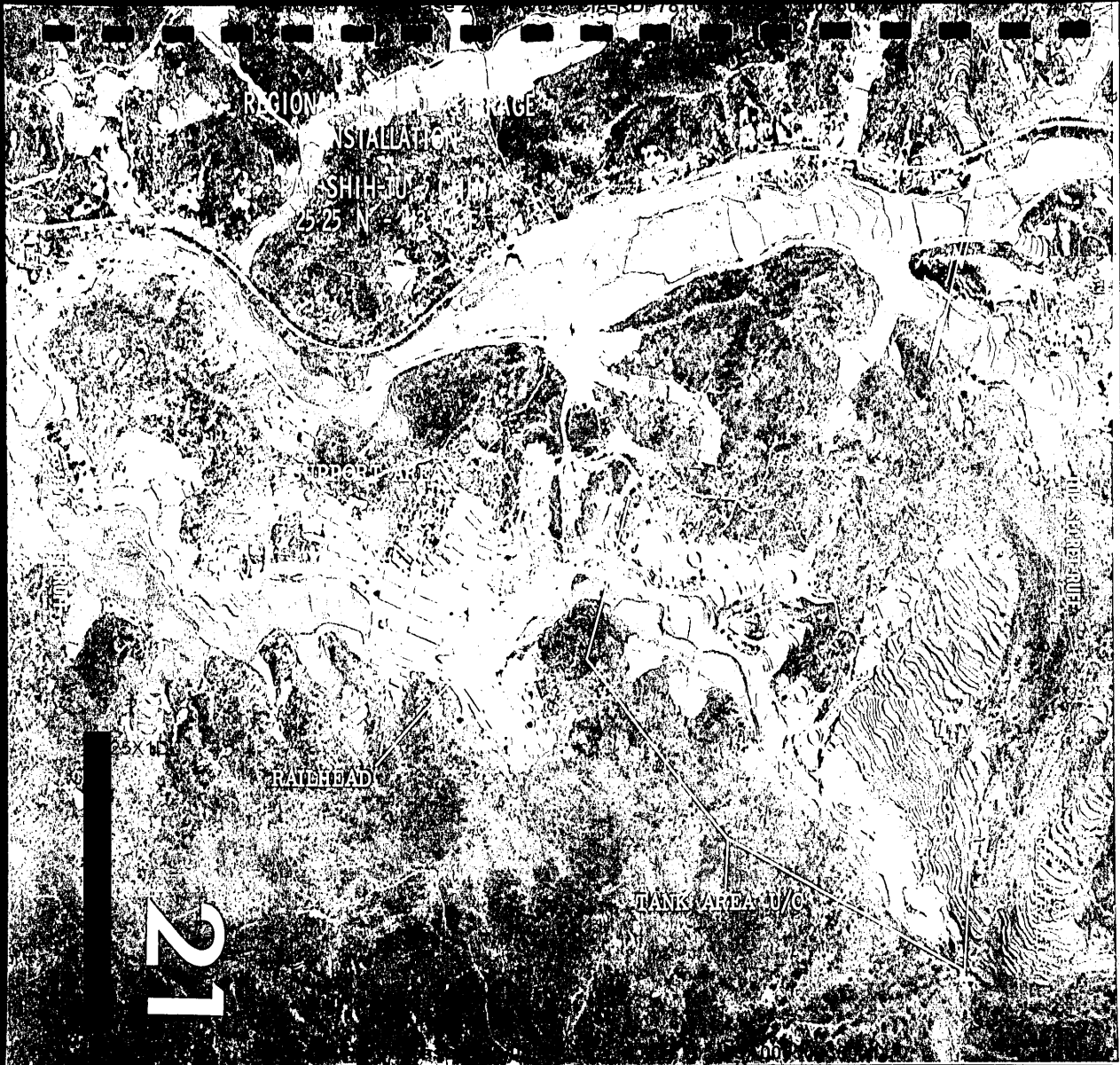
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113 30 E

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REGIONAL HEADQUARTERS

INSTALLATION

SHIHETU

575 N

SUPPORT AREA

RAILHEAD

TRANK AREA 40/C

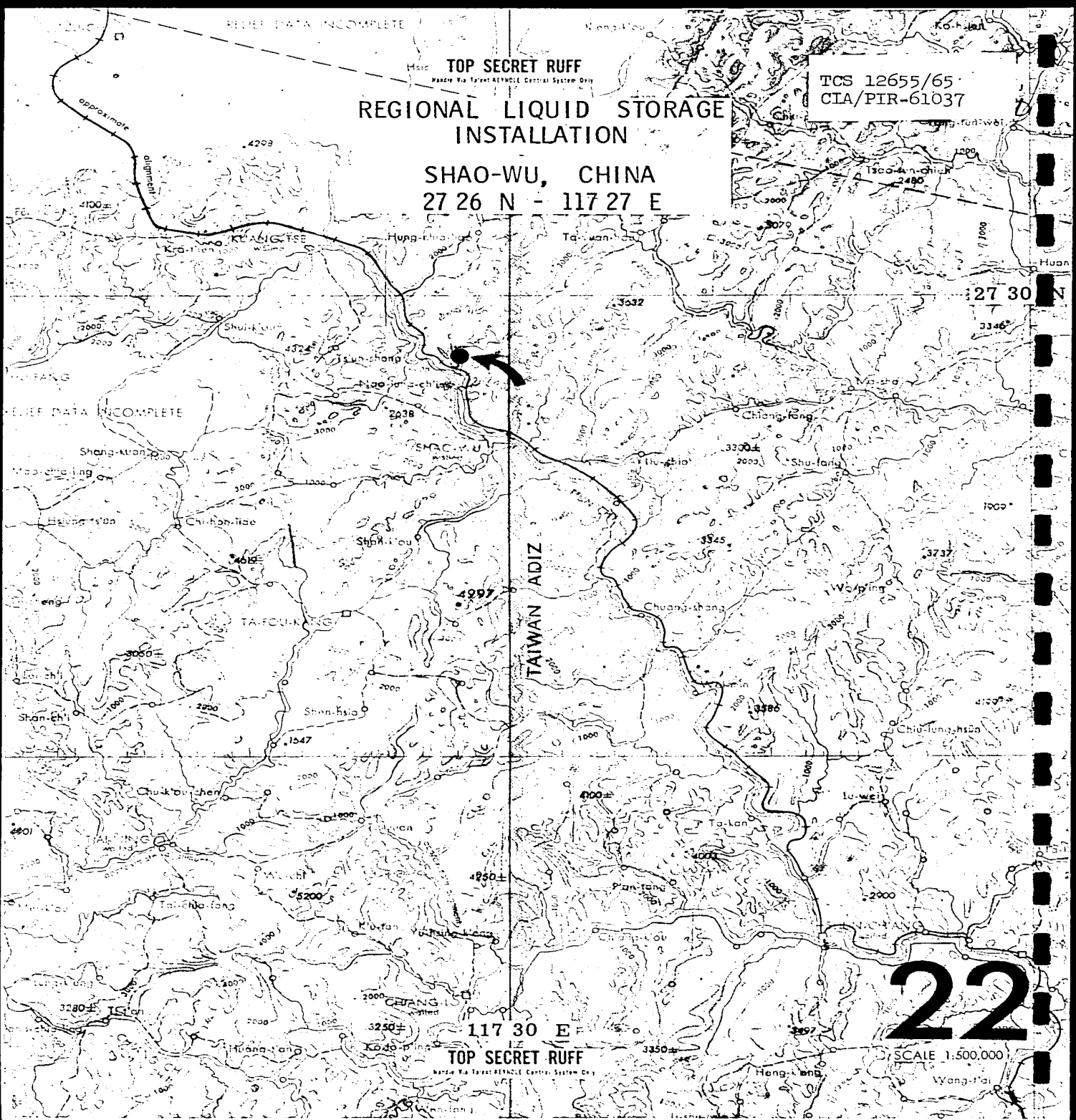
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# REGIONAL LIQUID STORAGE INSTALLATION

## SHAO-WU, CHINA 27 26 N - 117 27 E



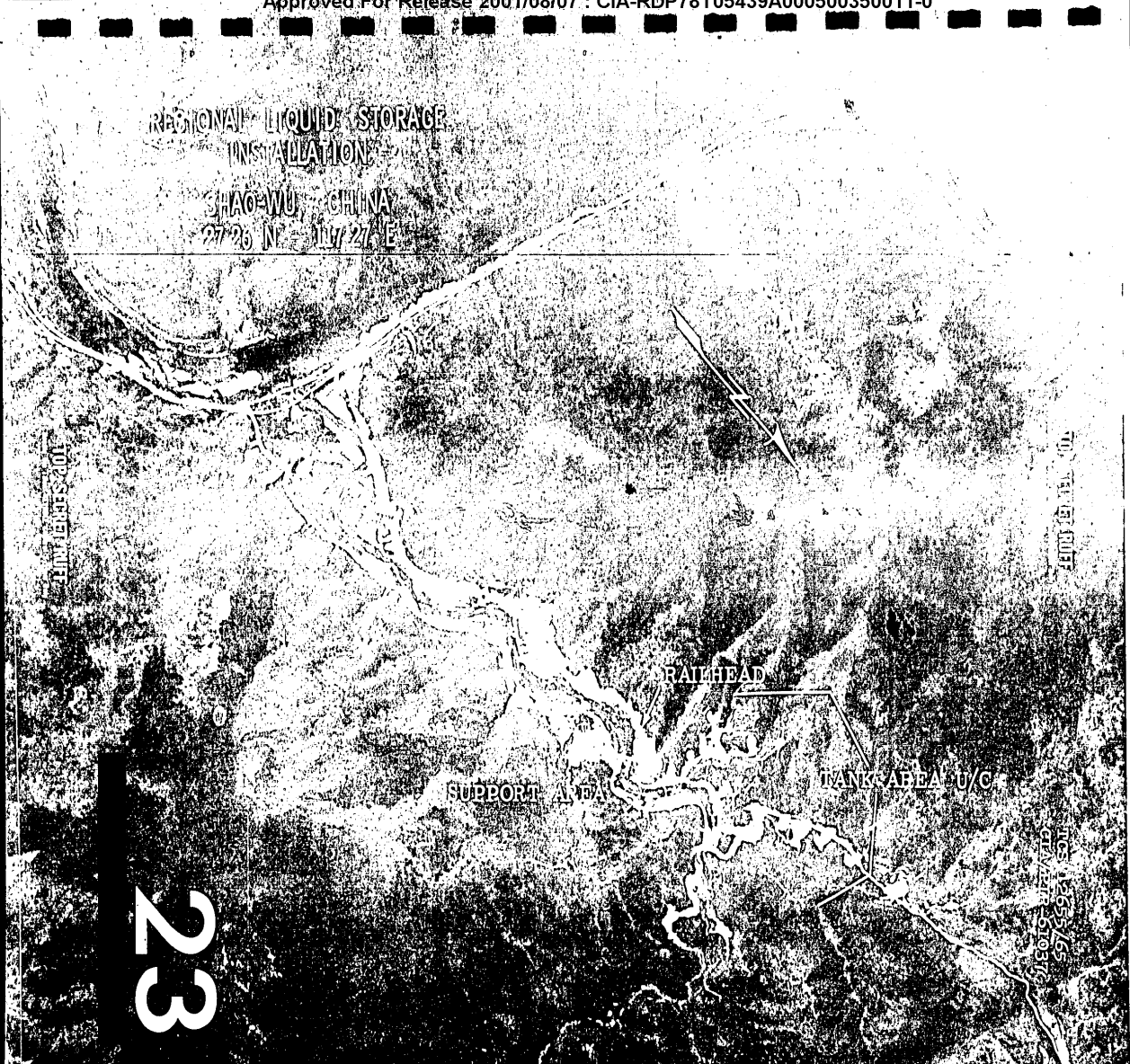
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REACTIONARY LIQUID STORAGE  
INSTALLATIONS  
SHAOWU, CHINA  
27°25' N 101°21' E



23

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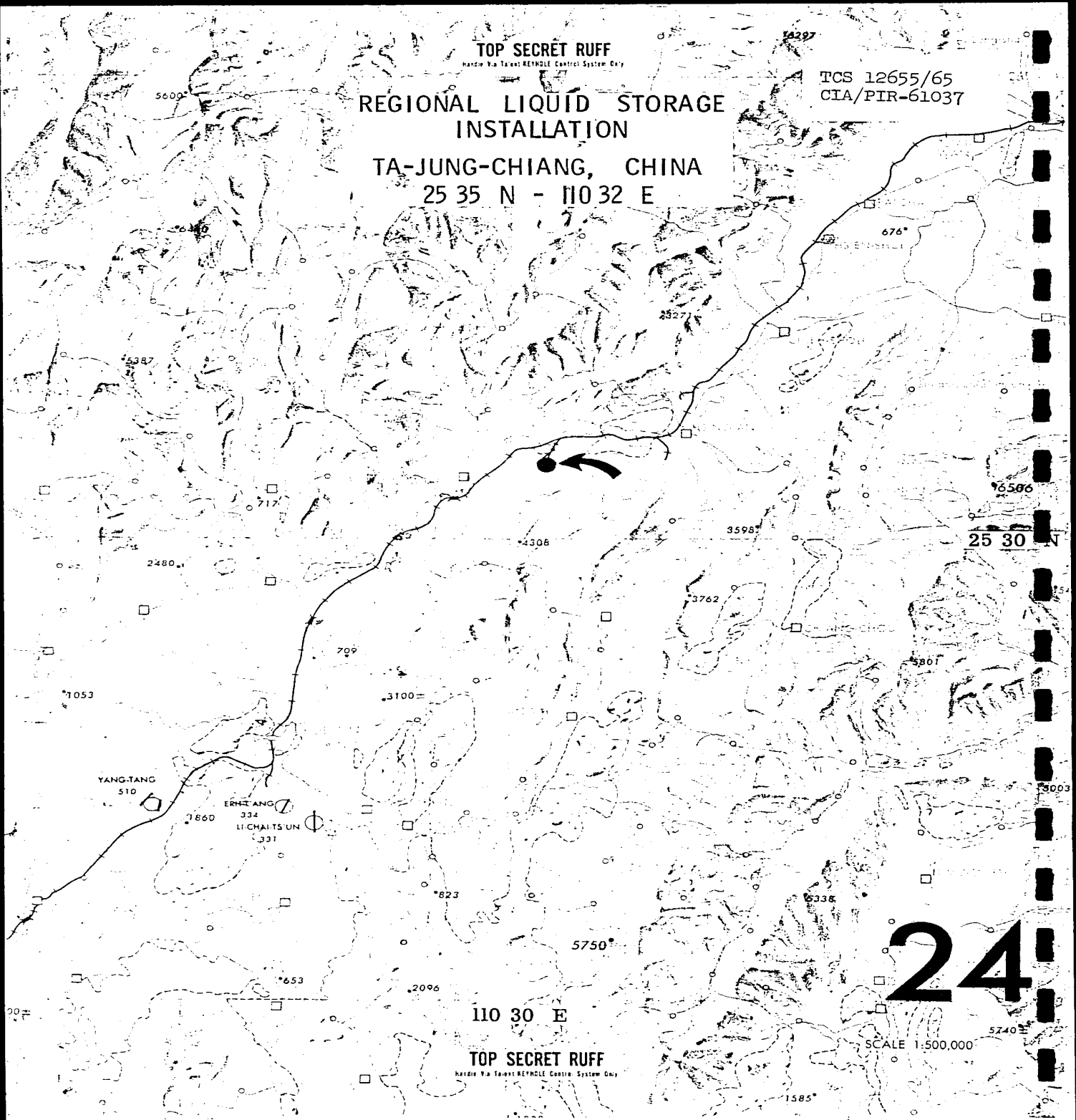
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# REGIONAL LIQUID STORAGE INSTALLATION

## TA-JUNG-CHIANG, CHINA 25 35 N - 110 32 E



110 30 E

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# 24

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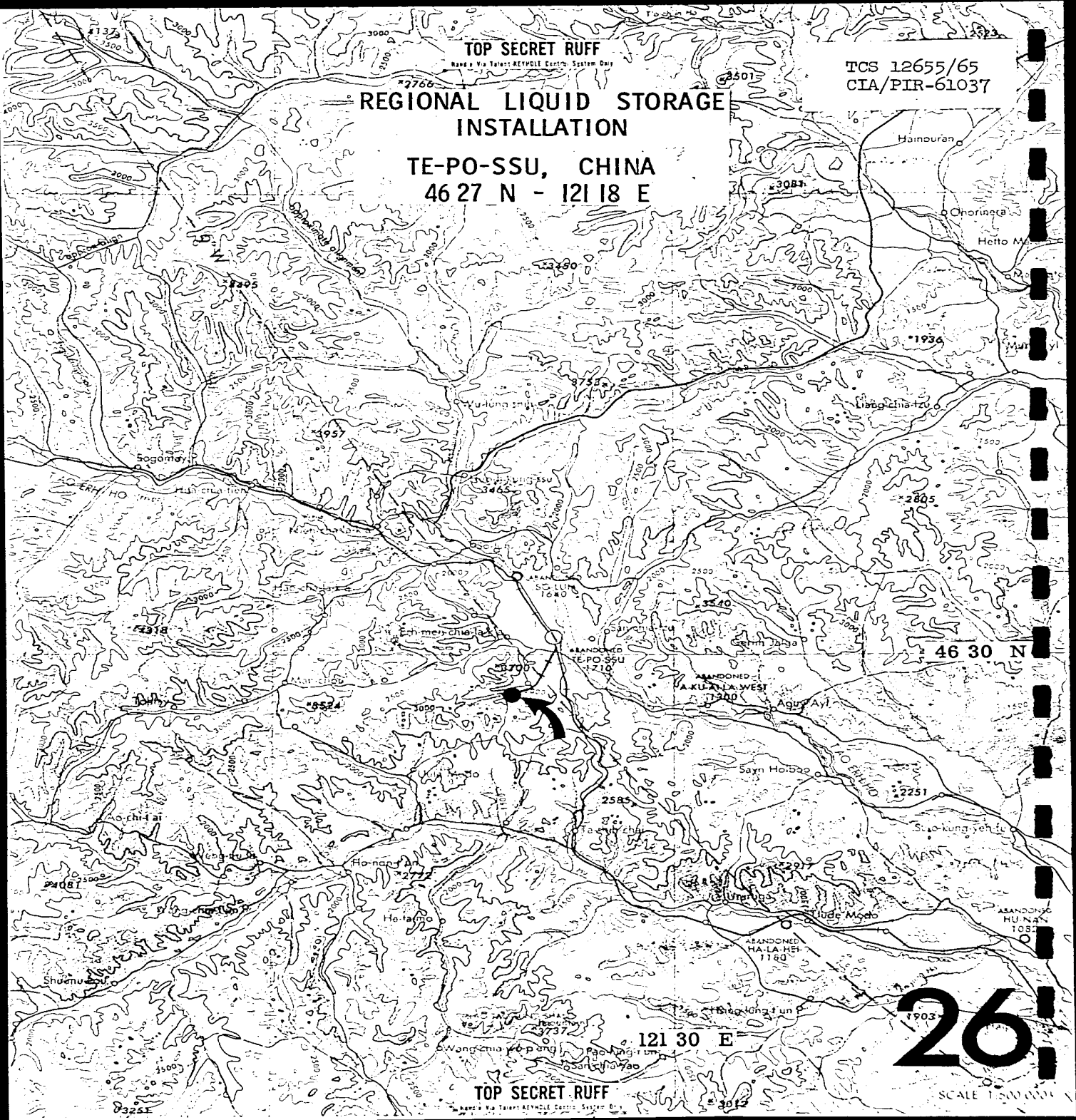
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REGIONAL LIQUID STORAGE  
INSTALLATION

TE-PO-SSU, CHINA  
46 27 N - 121 18 E



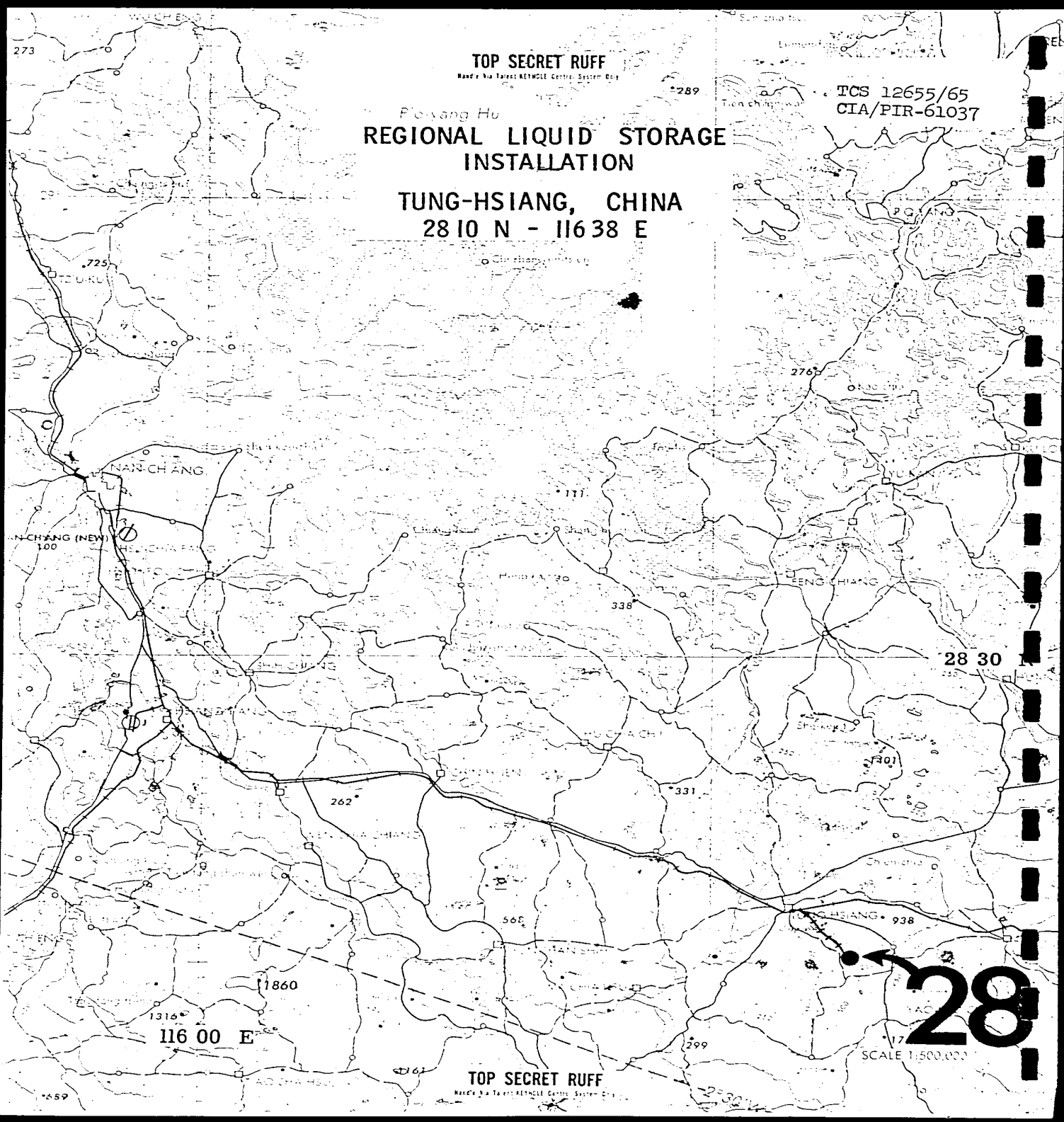
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CIA/PIR-61037

Pienyang Hu  
**REGIONAL LIQUID STORAGE  
INSTALLATION**  
**TUNG-HSIANG, CHINA**  
**28 10 N - 116 38 E**



28 30

116 00 E

28

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REGIONAL LIQUID STORAGE  
INSTALLATION

TUNG-HSIANG, CHINA  
28 10 N - 116 38 E

RAILHEAD

SUPPORT AREA

20 SEMI-BURIED TANKS

TOP SECRET RUMF

29

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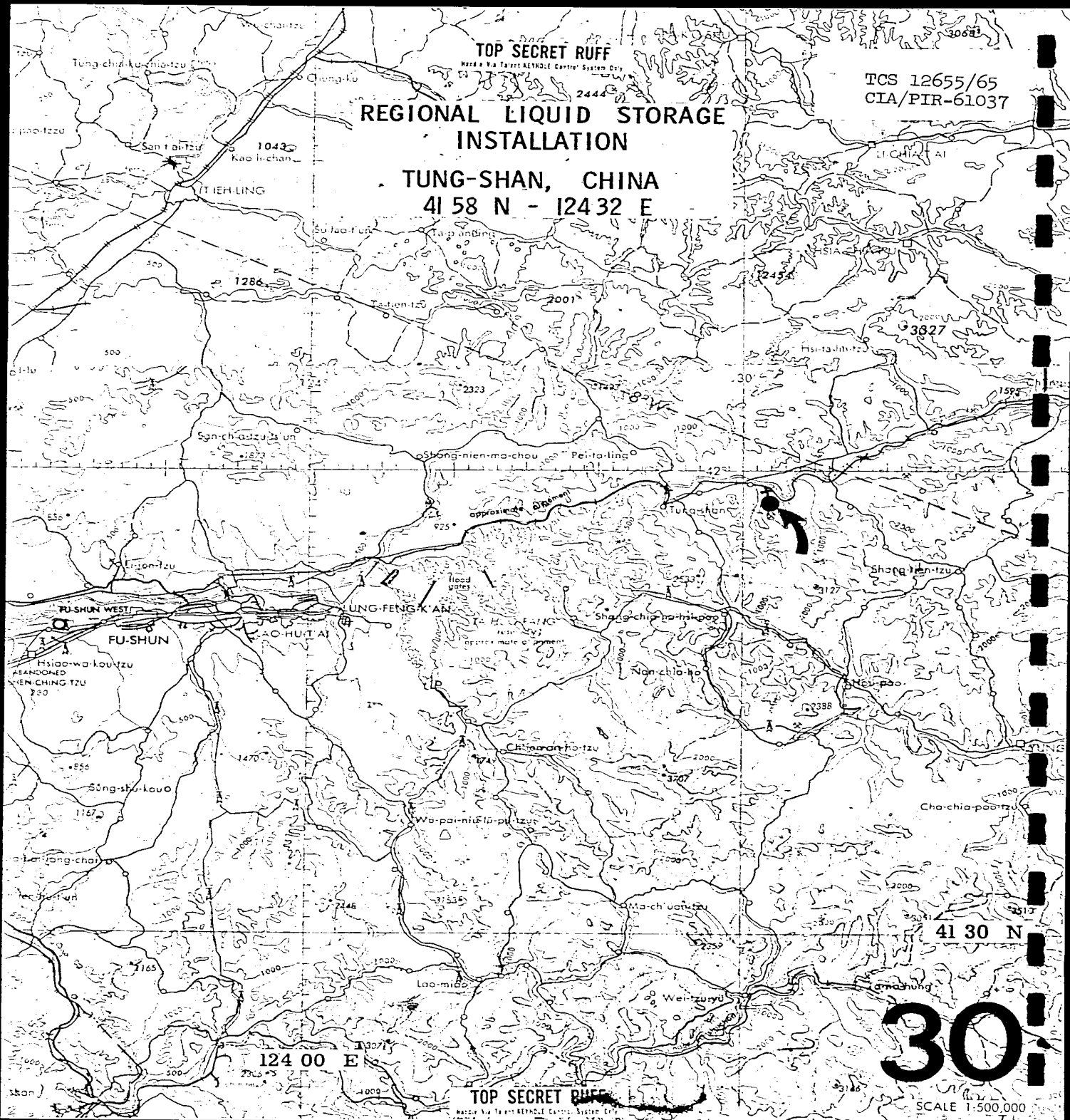
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CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

## TUNG-SHAN, CHINA 41 58 N - 124 32 E



# 30

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REGIONAL MILITARY STORAGE  
INSTALLATION

TUNG-SHAN, CHINA  
41 58' N - 124 32' E

RAILHEAD

SUPPORT AREA

20 SEMI-BURIED TANKS

TOP SECRET ROUTE

31

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CIA/PTIS/SGO/01





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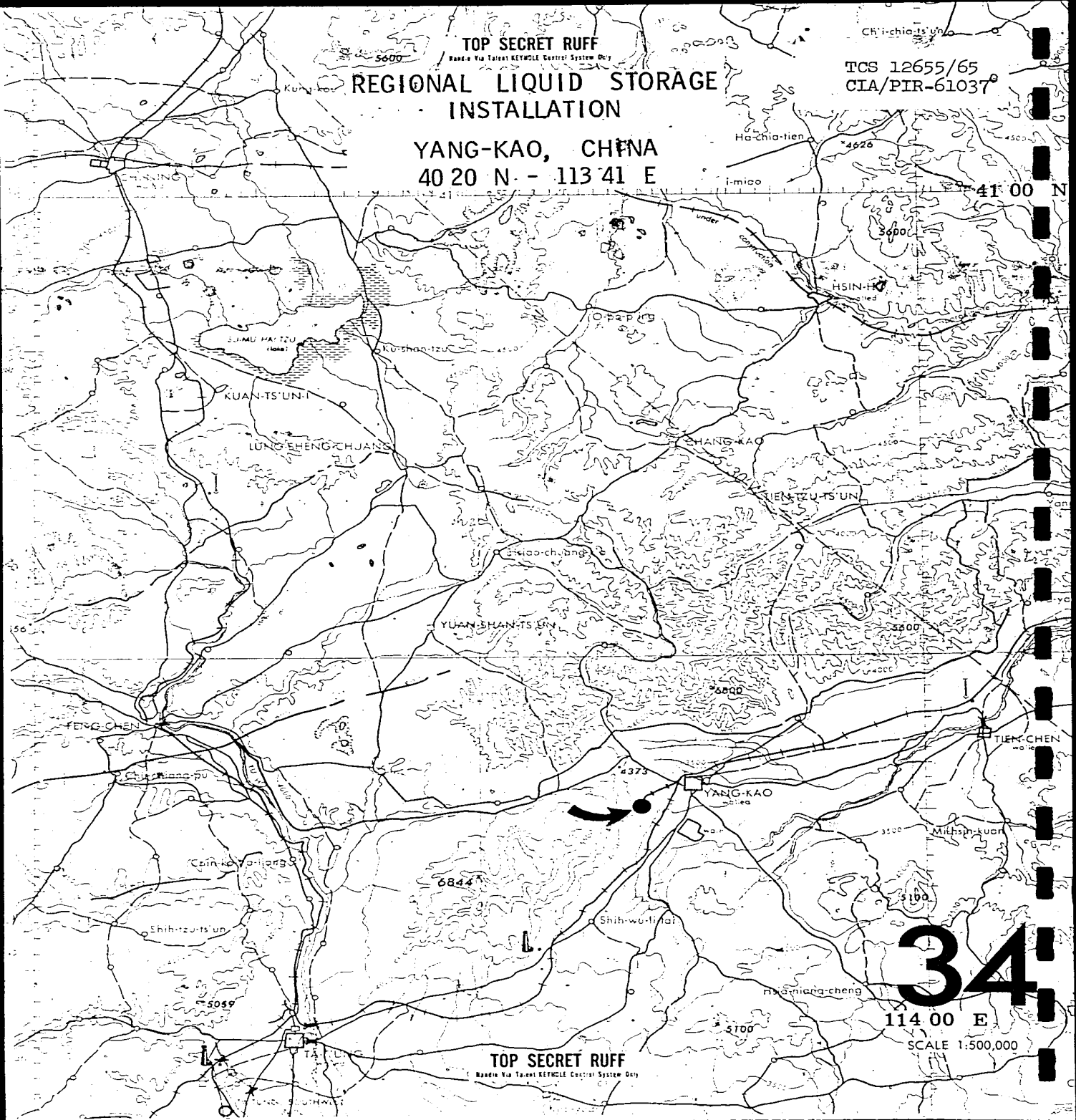
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# REGIONAL LIQUID STORAGE INSTALLATION

## YANG-KAO, CHINA 40 20 N - 113 41 E

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# 34

114 00 E  
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\*9219

TCS 12655/65  
CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

## YANG-LIN, CHINA 25 14 N - 103 06 E

594

\*7812

\*9531

⊕ ABANDONED  
YANG-CHIEH  
6420

\*8609

\*9836

\*8546

\*8484

\*9334

\*7097

7670\*

\*7653

\*9208

25 00

⊕ CIA  
(494)

6240

\*6942

8244\*

\*7680

\*6447

⊕ 6250

\*8123

\*9247

\*8064

\*8611

\*8835

103 00 E

# 36

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\*8779



SUPPORT AREA

REGIONAL LIQUID STORAGE  
INSTALLATION

YANG-LIN CHINA  
25 14 N 105 00 E

ALHEA

20 SEMI-BURIED TANKS

25X1D

37

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APR 1965

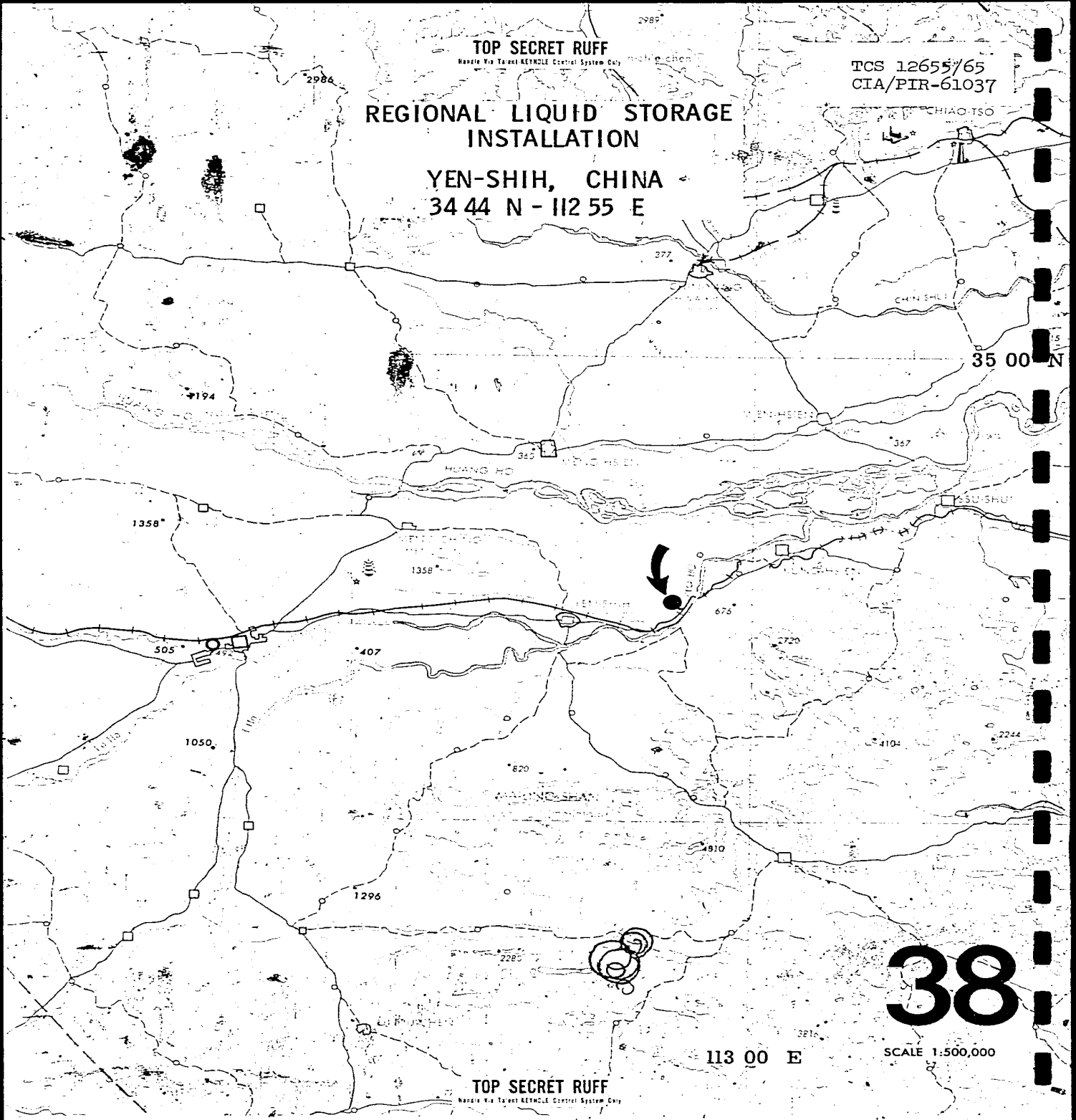
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CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

YEN-SHIH, CHINA  
34 44 N - 112 55 E



35 00 N

1358

1358

1050

1296

820

675

2720

4104

2244

4910

2280

3810

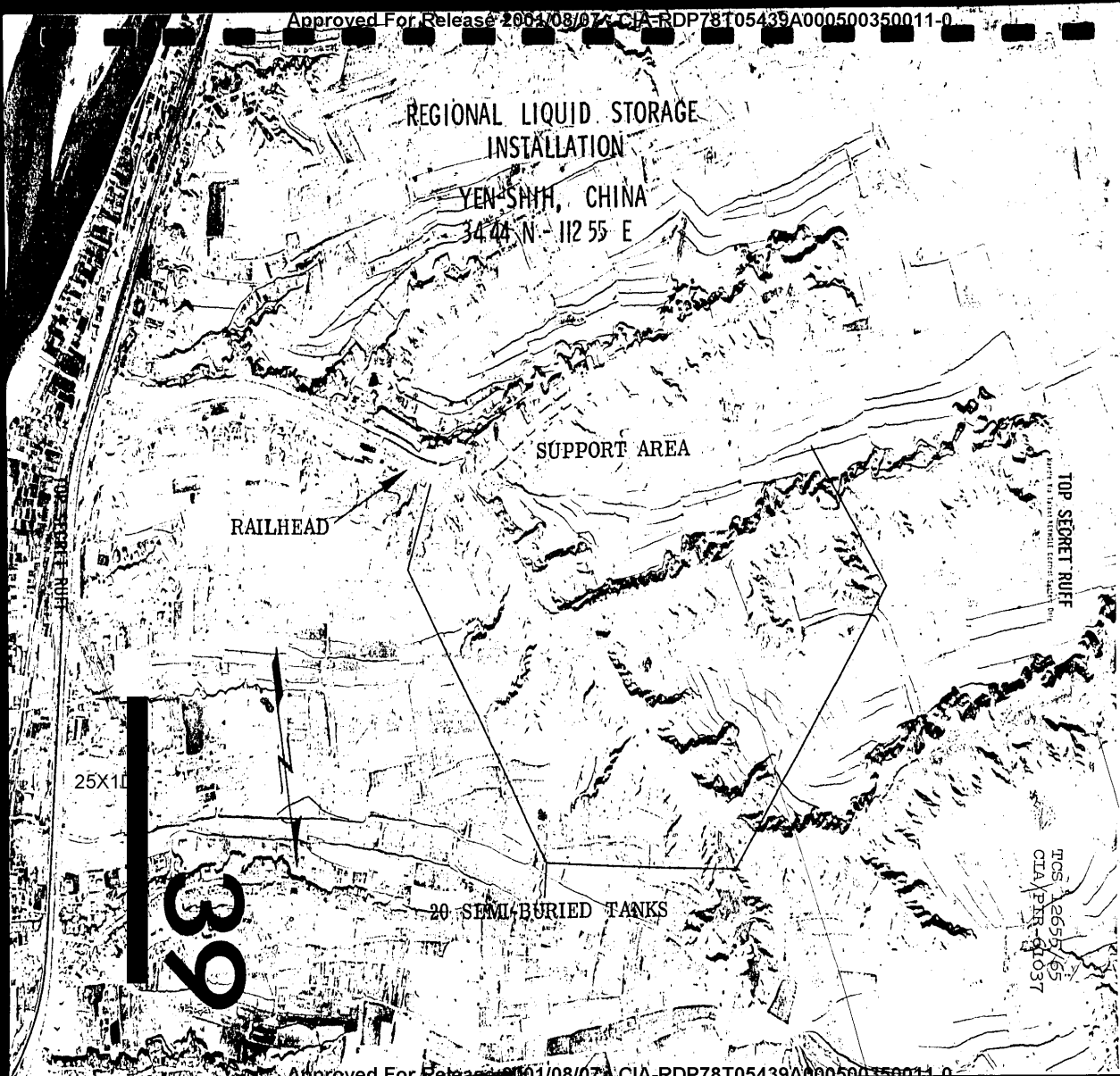
113 00 E

# 38

SCALE 1:500,000

TOP SECRET RUFF

Handle Via TAIPEI KEYHOLE Control System Only



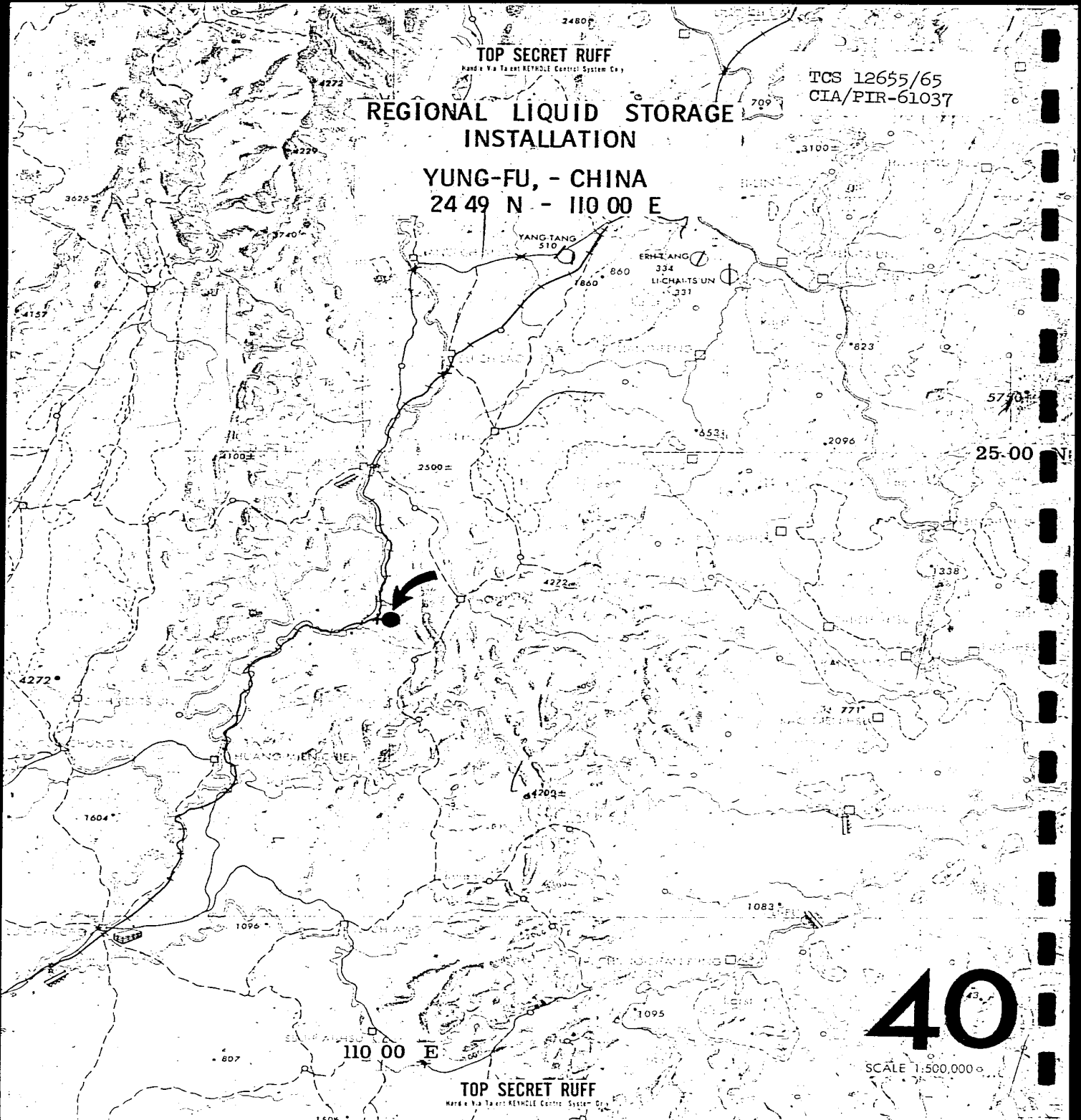
TOP SECRET RUFF

Handed Via Taser KEYHOLE Control System Co.

TCS 12655/65  
CIA/PIR-61037

# REGIONAL LIQUID STORAGE INSTALLATION

YUNG-FU, - CHINA  
24 49 N - 110 00 E



25-00 N

110 00 E

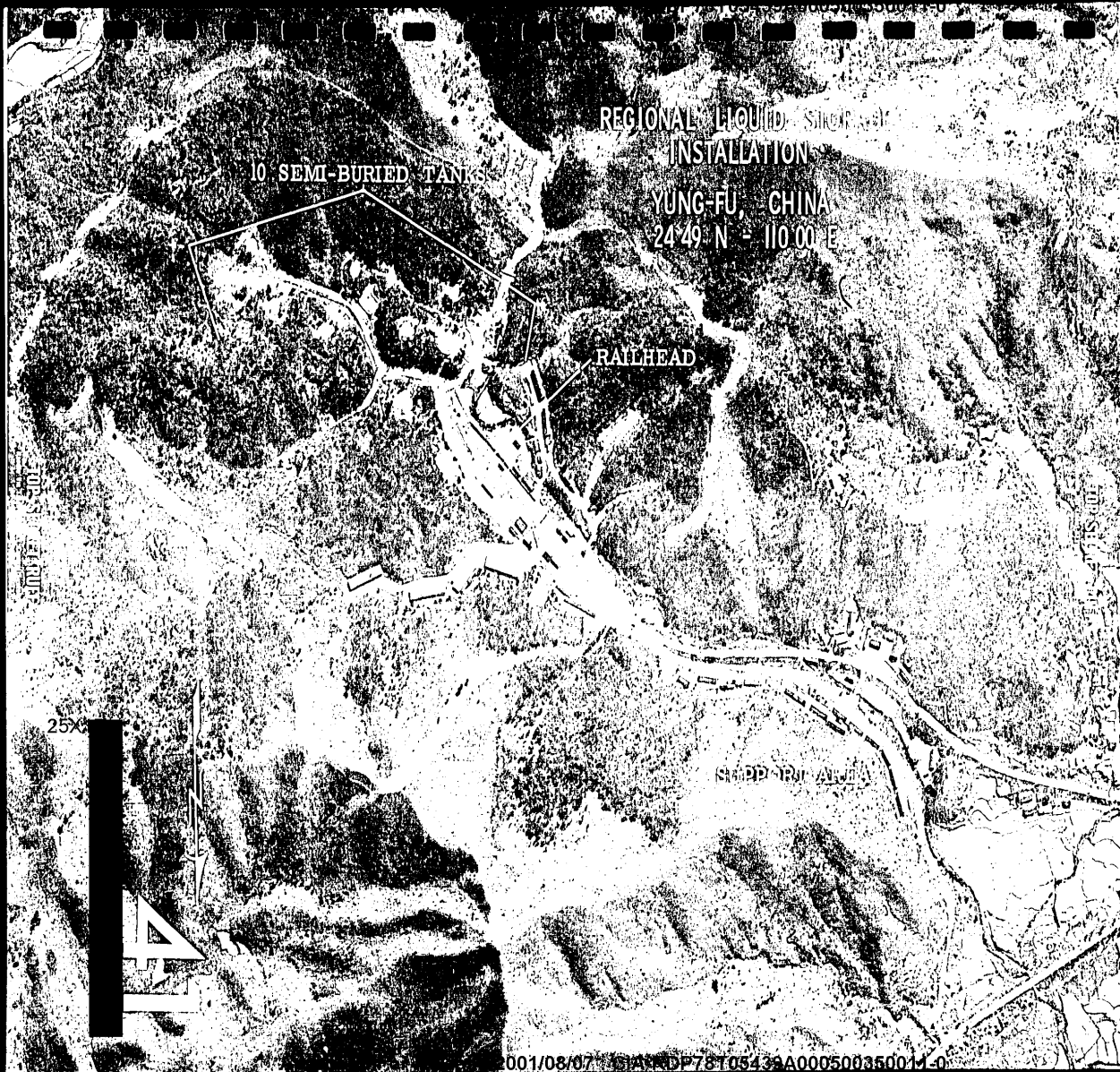
TOP SECRET RUFF

Handed Via Taser KEYHOLE Control System Co.

40

SCALE 1:500,000





TOP SECRET

S-	19696
int/	date
AG	18 Oct 65
MB	11/29/65
CI	10/29/65
RELEASED	

TOP SECRET

TOP SECRET

S-	19696
int/	date
76	18 Oct 65
MB	11/29/65
SECRET	
RELEASED	

TOP SECRET

ILLEGIB