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INFORMATION REPORT

PREPARED AND DISSEMINATED BY
CENTRAL INTELLIGENCE AGENCY

25X1

COUNTRY: Hungary

SUBJECT: Military Radio Equipment/Military Radio Frequencies/High Echelon Signal Regiments

DATE DISTRIBUTED: 5 Mar 1957

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SUPPLEMENT TO REPORT #

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[This report is the result of a joint collection effort by the Air Force, the Army and Cia and is disseminated in accordance with the provisions of NSCID #7]

USAF review completed.

ARMY review completed.

Military Radio Equipment

1. The following list represents the technical and operational characteristics of the military radio equipment used by the Hungarian Army:

a. R#40
Receiver tubes used: 12 BA6, 12BE6, 6J6
Power output of transmitter: 100 watts
Type modulation: Amplitude
Oscillator: EM4 tube
Frequency coverage: Transmitter: 2,500 Kc/s to 25,000 Kc/s
Receiver: 100 Kc/s to 30,000 Kc/s
Antenna Characteristics: Eight telescoping sections (Vertical antenna) approximately 11 meters high. [Sketch 2]
Power supply: 1½ Kw gas motor driven generator manufactured by "Kismotor es Gepgyar" company located at Fehervare St in Budapest. This is a 220 volt, 50 cycles three phases, current.

b. R#50
Type modulation: Amplitude
Power output: 1.5 Kw
Signal Characteristics: Phone and CW
Frequency coverage: Transmitter: 1,500 Kcs to 15,000 Kc/s
Receiver: 100 Kc/s to 30,000 Kc/s
Antenna characteristics: Telescopic antenna, 15 meters high [Sketch 6]

c. R#7
Type modulation: Amplitude
Power output: 10 to 20 watts
Area coverage: 50 to 80 Kilometers
Signal characteristics: Phone and CW

d. R#20
Type modulation: Amplitude
Power output: one half to one watt
Area coverage: 10 to 12 Km in bad weather
20 to 25 Km in good weather

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Frequency coverage: 1,500 Kc/s to 5,000 Kc/s for both transmitter and receiver.
Signal characteristics: Phone and CW

e. R#10
Type modulation: Frequency modulation
Area coverage: 10 Kilometers
Frequency coverage: 1,500 Kc/s to 5,000 Kc/s both the transmitter and receiver.
Signal characteristics: Voice only

Military Radio Frequencies

2. The Hungarian Army uses the radio frequency spectrum of 3,000 Kc/s to 7,000 Kc/s. The most popular frequencies used are selected between 3,000 Kc/s and 5,000 Kc/s. The radio frequency band from 5,000 Kc/s to 5,500 Kc/s is not popular and is very seldom used.

3. Specific frequencies most used are the following: 3,200 Kc/s, 3,400 Kc/s, 3,500 Kc/s, and 3,800 Kc/s. Frequencies and call letters are changed every 24 hours for security purposes. Each station has a secondary frequency assigned to be used only when the original frequency is jammed or blanketed by atmospherics.

High Echelon Signal Regiments

4. There are three high echelon signal regiments directly supporting the Ministry of Defense. These are located in Budapest, in Vac and in the vicinity of Gyongyos. The one in Budapest is the 43d signal regiment located in the "Petofi" military camp at Budaorsi St. 49-53, in the 11th District. The commanding officer of this regiment is Lt Col Moricz Ferenc 25X1

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5. In time of war, these three regiments can take command of all army communications, receiving their orders directly from the Ministry of Defense. These regiments serve also as a liaison between armies and the Ministry of Defense. Each of these signal regiments has approximately 800 men in time of peace, which can be raised to 3,000 men in time of war. In 1955 the regiment stationed in Vac had been subject to a big reorganization due mainly to disciplinary measures.

6. Each regiment has a radio operators battalion, a teletype battalion and linemen and telephone operators battalion, Sketch 17. The following is a breakdown of each of these three battalions:

a. Radio operators battalion: Approximately 900 to 1000 men in time of war, and 250 enlisted men and 25 officers during peace time. It is composed of a heavy radio company, a medium radio company and a light radio company. [Sketch 2]

(1) The heavy radio company is subdivided into three radio platoons, with two sections in the first two platoons, and four sections in the third platoon. There are two R#50 radio sets in the first two platoons, and four R#40's in the third platoon. Each section of a platoon has approximately six to eight men. These are: the section chief, a commissioned officer, the assistant section chief, a non-commissioned officer, a radio mechanic, three radio operators, a powerman and a driver.

(2) The medium radio company has two radio platoons and a filler platoon to back up the first two in case of necessity. Each platoon is composed of three sections with one R#7 type radio in each. The personnel includes a section chief who is a non-commissioned officer, two radio operators and a driver.

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(3) The light radio company has three platoons: the radio transmitting platoon, the radio receiving platoon and the linemen platoon. The latter is responsible for laying underground cables and field telephone lines between the transmitter and the receiver sites. There are eight to ten R#20 and R#10 transmitters in the first platoon with a commissioned officer in charge of 20 to 30 men. The receiving platoon has 14 receivers, of modified Soviet type, made in Hungary, with a frequency coverage of about 100 Kc/s to 30,000 Kc/s. These receivers are installed in two trucks (seven in each) operating in conjunction with R#50, R#40 and R#7 transmitters located at a distance of about three to five Km from the receiving site (truck). Underground cables connect each transmitter to a receiver in the truck. Every one of the radio operators can contact his counterpart at the transmitting site by telephone through a 25 circuit telephone switchboard. This switchboard has also many circuit connections with the regimental headquarters to receive and relay messages. [Sketch 7] The receiving station (truck) as well as the transmitters are always installed in ditches as a protective measure. Approximately 150 cubic meters of dirt must be moved in order to completely camouflage the truck. It takes usually 15 hours for the radio operators to do it. There is a crew of six to eight men at each transmitting site and ten to eleven men at the receiving site. (truck) A radio operator at at the transmitting site monitors continuously his counterpart at the receiving station to enable continued communications without interruption just in case the receiving station breaks down. [Sketch 7]

b. Teletype Battalion: Approximately 200 to 225 enlisted men and officers in peace time. The battalion has three companies, each company having three platoons and each platoon composed of three sections. In each section there is an officer a non-commissioned officer, three teletype operators, and one driver. The teletype sets are "Siemens" type one in each section. This battalion can operate independently from the radio or wire battalions. It has its own repair and maintenance personnel, drivers and operators. [Sketch 3] (Source was not well acquainted with additional details of this battalion.)

c. Linemen and Telephone Operators Battalion: Composed of a light line company, a permanent line company, a heavy line company, and a switchboard telephone operators platoon directly attached to the battalion. Each company is subdivided into three platoons and each platoons into three sections. [Sketch 4] Each section has a comissioned officer in charge of the operations, a non-commissioned officer as an assistant, and five to seven linemen and telephone operators. Each of the above mentioned companies has the following responsibilities:

(1) The light line company is responsible for fast temporary wire installations using short portable telephone poles, about two to three meters high and five to eight Cm in diameter.

(2) The heavy line company is responsible for laying underground cables between companies, battalions, regimental headquarters, etc.

(3) The permanent line company has the responsibility of the fixed overhead wire installations by using standard telephone poles between battalions, regiments, divisions, etc.

(4) The switchboard telephone operators platoon, which is attached directly to the linemen battalion, supplies all of the switchboard telephone operators to the signal regiment.

[redacted] following charts and sketches referred to in this report: 25X1

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Sketch 1. Organizational Structure of the 43d Signal Regiment.

Sketch 2. Organizational Structure of the Radio Battalion of the 43d Signal Regiment.

Sketch 3. Organizational Structure of the Teletype Group of the 43d Signal Regiment.

Sketch 4. Organizational Structure of the Linemen and Telephone Operator Battalion of the 43d Signal Regiment.

Sketch 5 Antenna Used with the R#40 Radio Set.

Sketch 6. Antenna For $#50 Radio Set.

Sketch 7. Truck Mounted Radio Net Control Station. 7

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Enclosure (A)

ORGANIZATIONAL STRUCTURE OF THE 43RD SIGNAL REGIMENT
(A SPECIAL UNIT DIRECTLY SUPPORTING THE MINISTRY OF DEFENSE)

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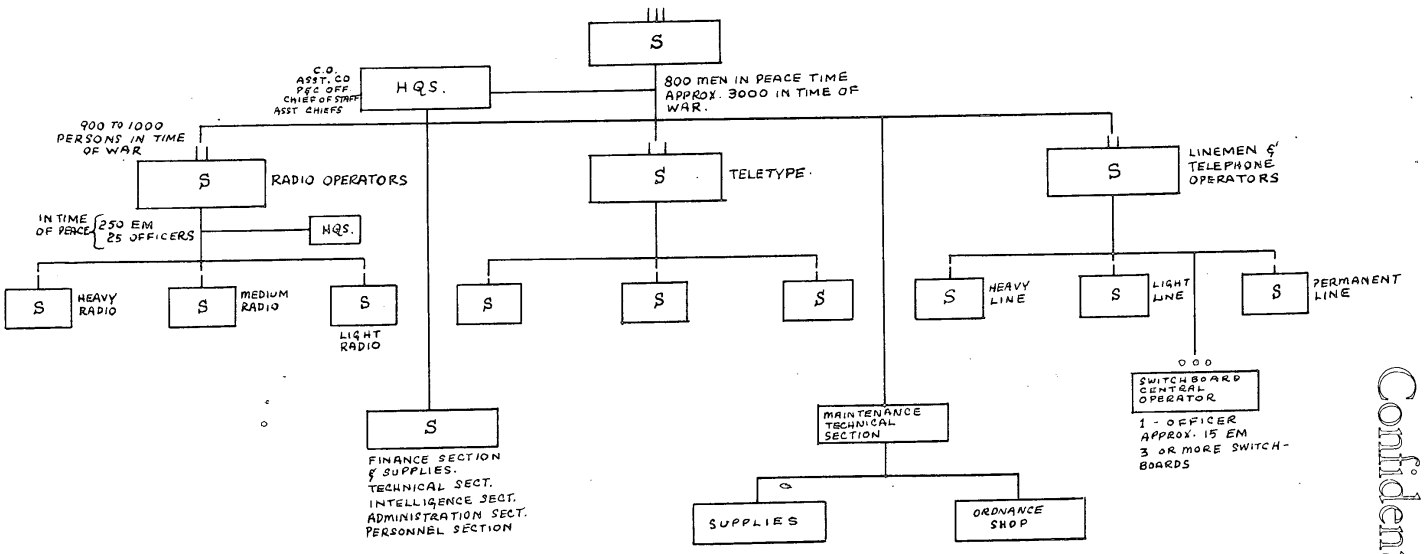

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Enclosure (B)

ORGANIZATIONAL STRUCTURE OF THE RADIO BATTALION OF THE 43RD SIGNAL REGIMENT

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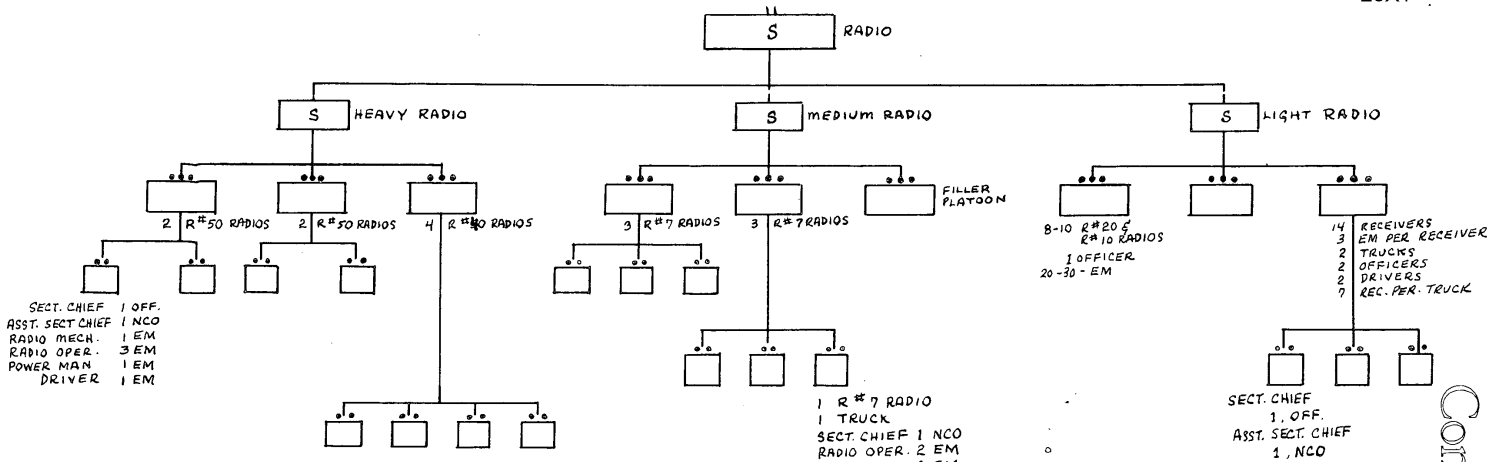

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Enclosure (2) ORGANIZATIONAL STRUCTURE OF THE TELETYPE GROUP OF THE 43RD SIGNAL REGIMENT

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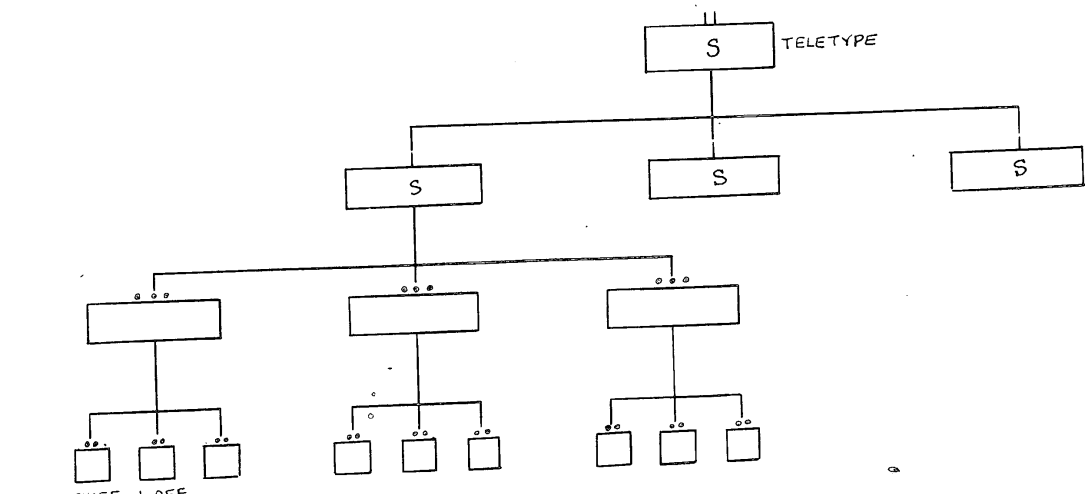

SECTION CHIEF	1 OFF
ASST. SECT CHIEF	1 NCO
TELETYPE OPER.	3 EM
DRIVER	1 EM
1 TRUCK	1 "K-300" OR "CSEPEL-350"
1 TELETYPE	"SIEMENS" WIRE OR UNK TYPE RADIO TELETYPE

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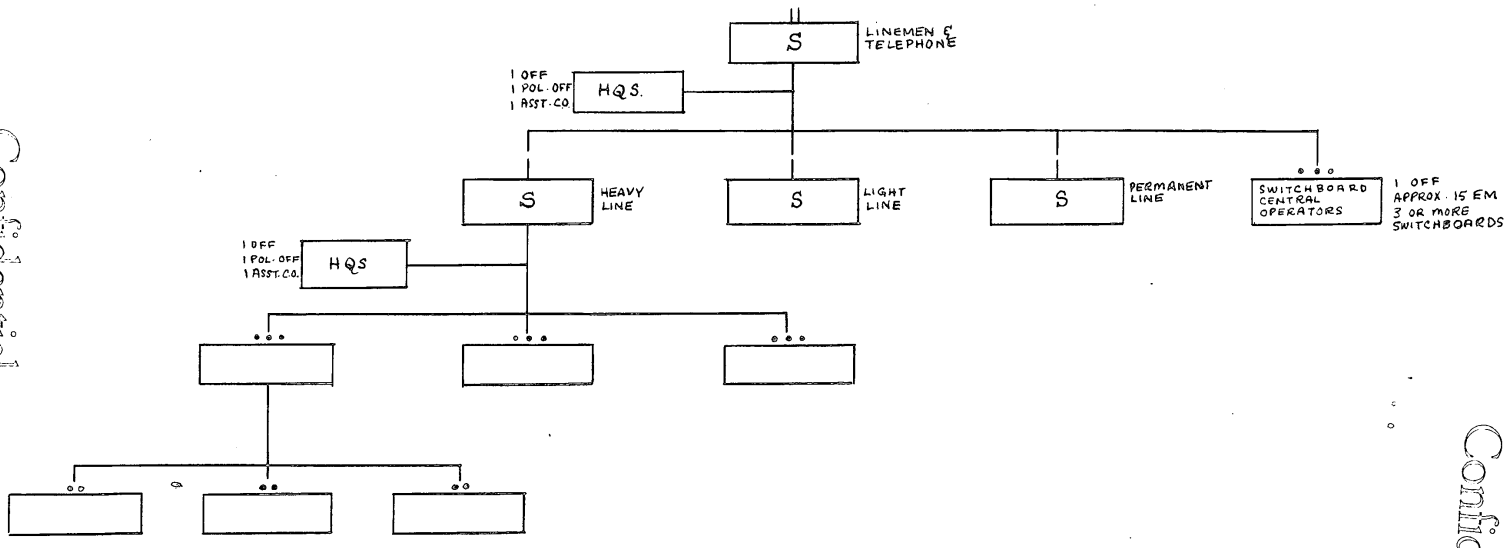
Enclosure (5)

ORGANIZATIONAL STRUCTURE OF THE LINEMEN & TELEPHONE OPERATOR BATTALION OF THE 43RD SIGNAL REGIMENT 25X1



SECTION CHIEF 1 OFF.
ASST. SECT. CHIEF 1 NCO
LINEMEN 5-7 EM
OR TEL. OPERATORS

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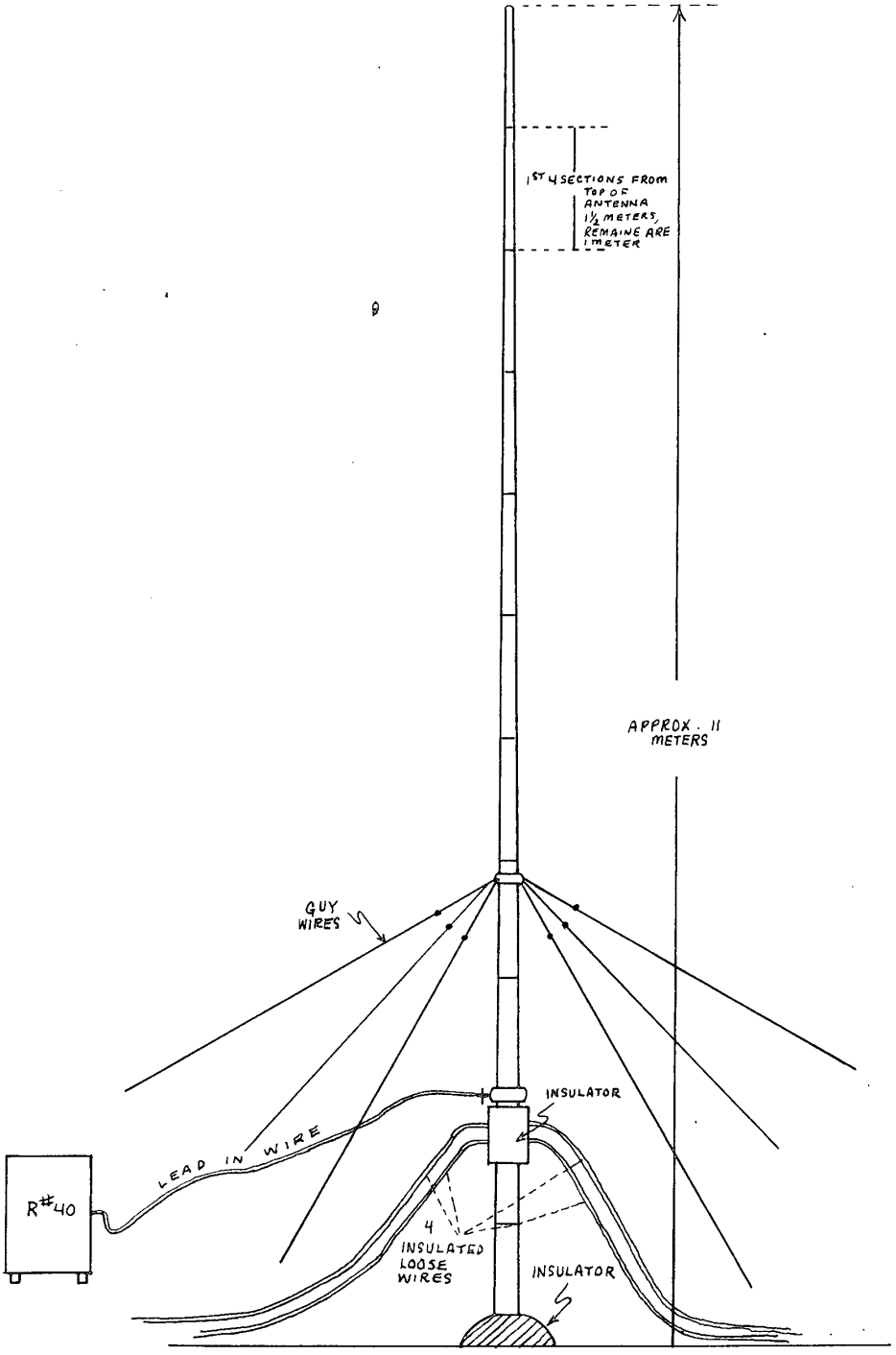

Enclosure (E) ~~SKETCH #(E)~~ ANTENNA USED WITH THE R#40 RADIO SET

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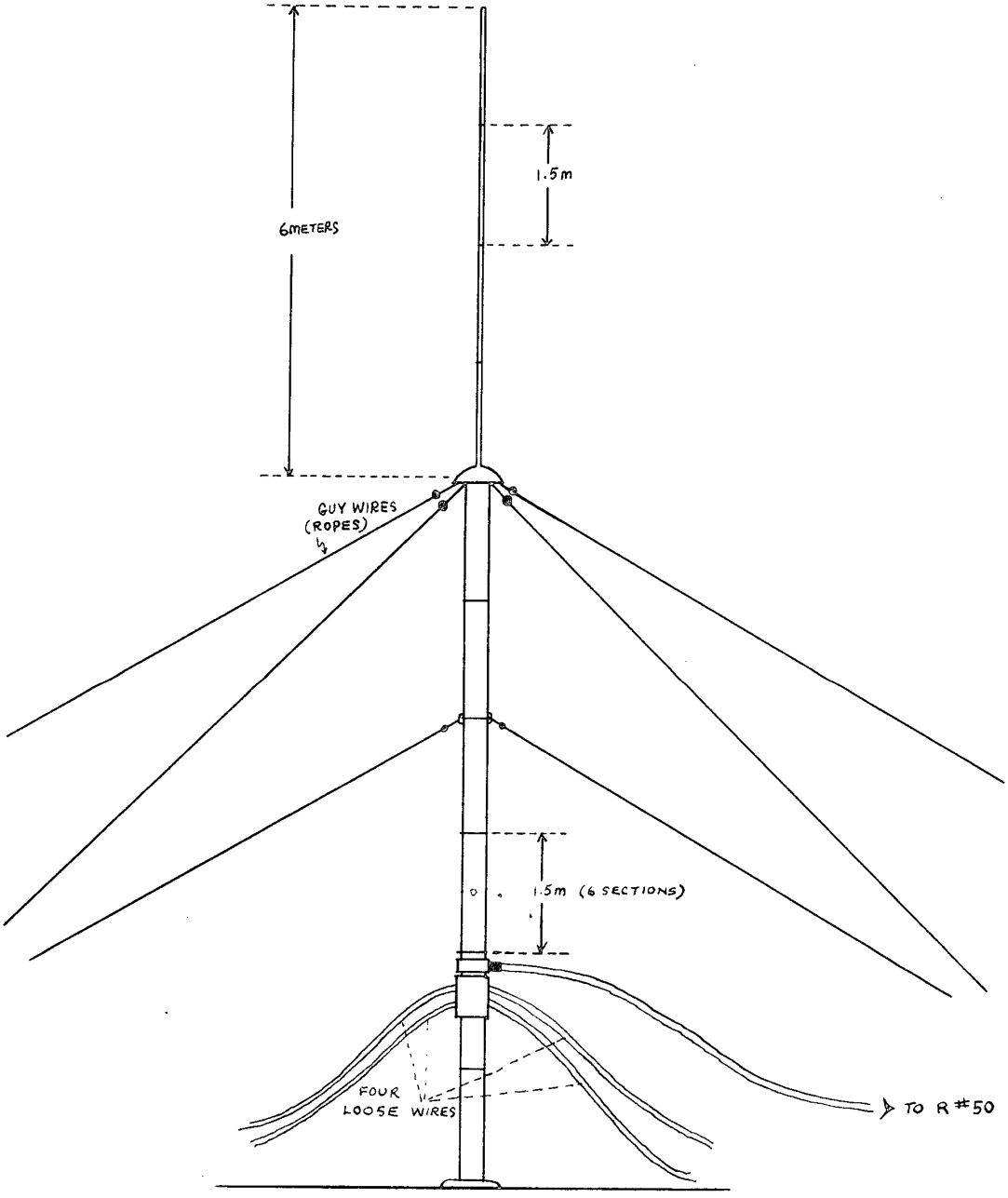

Enclosure

~~SKETCH #F~~

ANTENNA FOR R#50 RADIO SET

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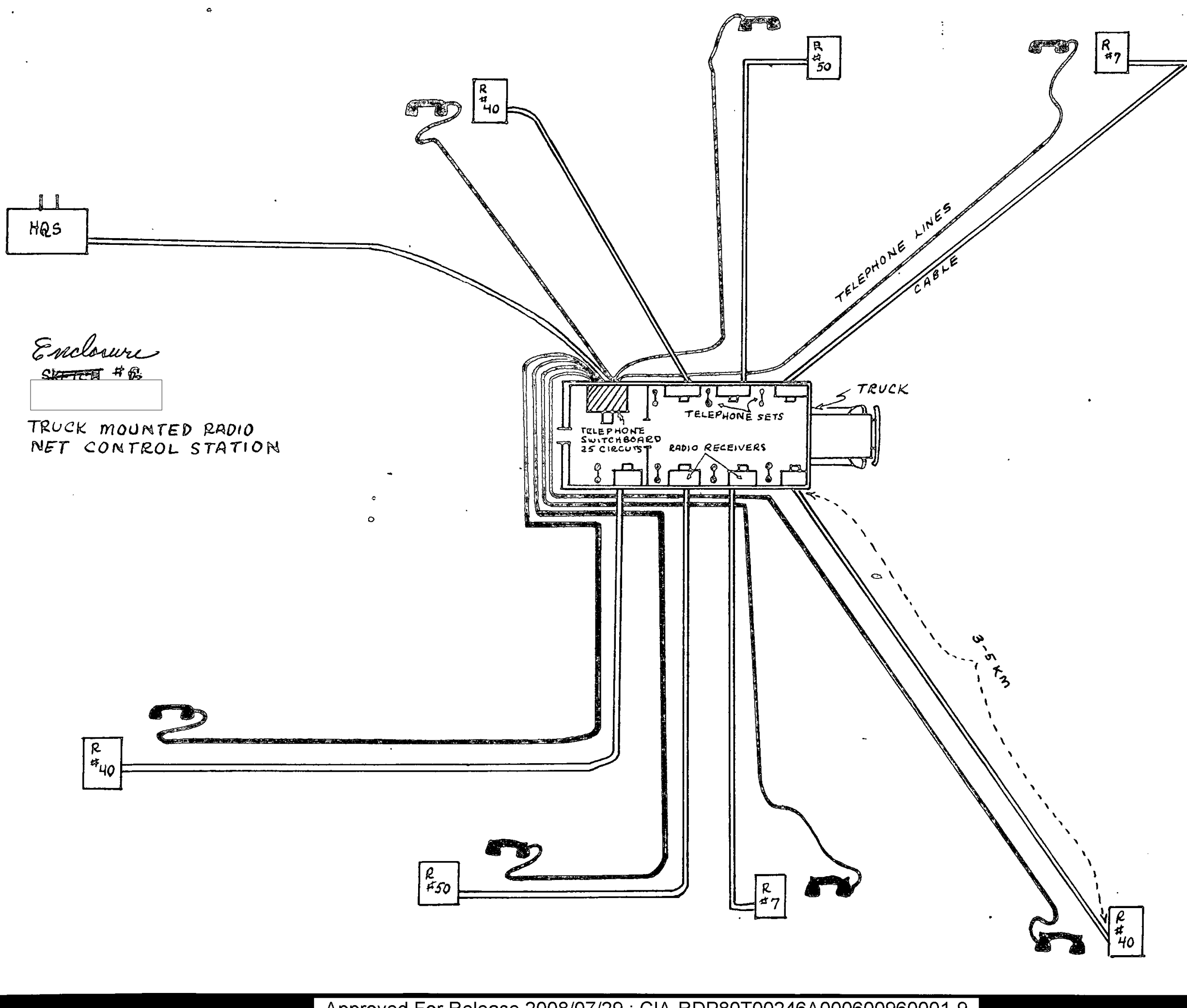

Enclosure
~~Sketch #6~~
[redacted]

TRUCK MOUNTED RADIO NET CONTROL STATION

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