

CONFIDENTIAL

AM

DG 59-899

14 MAY 1959

: Chief, [redacted]  
 : Chief, KUCUB

DOC	79	REV DATE	1 APR 1960	BY	064540
ORIG COMP	033	CPI	56	TYPE	103
ORIG CLASS	C	PAGES	2	REV CLASS	C
JUST	22	NEXT REV	2010	AUTH:	HR 70-2

- Engineering
- AS-6 Base Station Installation )

25X1

1. This dispatch sets forth our recommendations regarding installation of the AS-6 Base Station terminal equipment at [redacted]. This installation was discussed with [redacted] during his recent visit to [redacted]. Due to the impending target date, 1 September 1959, it is desired that these recommendations be reviewed and that concurrence or proposed changes be noted and forwarded as soon as possible.

25X1

25X1

25X1

2. Plans for the transmitter site include the following:

- a) Number 4 antenna bearing 35° would be used for the lower frequency portion (approximately [redacted] of the required frequency range of the equipment).
- b) A new antenna bearing 30° with the following approximate design parameters: apex angle of 30°, leg length 300 ft., and 60 ft. height is planned to replace antenna No. 3 now bearing 35°. This antenna would be used for the higher frequencies [redacted]. The exact design will be determined when further investigation has been completed regarding the characteristics of the field unit antenna.
- c) Transmitter No. 13, an E31-4, would be modified for use as the AS-6 transmitter while transmitter No. 14, an MF-4, would be removed to make room for the AS-6 interrogation equipment.

25X1

25X1

25X1

3. Plans for the receiver site are as follows:

- a) Antennas number 2 and 16 bearing 35° would be used for diversity reception on the lower frequencies [redacted]

25X1

25X1

25X1

CONFIDENTIAL

**CONFIDENTIAL**

ENG 29-899

**SUBJECT: AS-6 Base Station Installation**

b) Two new antennas similar in construction to those of paragraph 2 (b) are planned for the higher frequencies [redacted] one to be placed between antennas 5 and 6, the second between antennas 17 and 19.

25X1

c) Space for the terminal equipment (four AS-4 type racks) would be made available by removing two operating positions from the main operating room, preferably along the west wall.

4. Interrogation from the AS-6 Base station transmitter is to be controlled remotely from the receiver site and at least 2, and possibly 3, telephone pair will be required between the receiver and transmitter sites. Information here indicates that microwave channels are available which are superior to land lines. It is estimated that installation time for this equipment will be approximately 3 weeks. It is planned that [redacted] under the direction of a cleared contractor's representative, will install the equipment and assist in the installation of the antennas. Antenna plot plans of both sites are attached indicating the approximate locations of the proposed antennas. KUCLUB plans to furnish all antenna equipment and shipment will be initiated in the near future unless advised to the contrary.

25X1

**Attachments:**

1. D5360-TS-01 - Transmitter Site Rhombic Antennas - 2 each
2. D5360-RG-03 - Receiver Site - 2 each

13 May 1959

**Distribution:**

- Original + 2 - Chief, [redacted] w/att.  
1 - OC-HC, w/o att.  
1 - OC-E Chrono, w/o att.  
1 - R+D/EP, w/o att. ✓  
1 - SDS Project File, w/o att.  
1 - FES, w/o att.  
1 - SDS Chrono, w/o att.  
1 - OC-ED, w/o att.

25X1

**Origination:**

OC-E/SEB/SDS [redacted]

13 May 1959

25X1

**CONFIDENTIAL**