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~~TOP SECRET~~

8 February 1963

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To: Code 5170

From: Code 5430

Subj: Command System

1. We have serious reservations about:
 - (a) All command functions being proposed as all on one frequency.
 - (b) The rather elaborate arming tone sequence.
2. I propose we reconsider:
 - (a) The use of two frequencies, one as an alternate to the other.
 - (b) What reliability we sacrifice with the elaborate tone sequence proposed.
3. Before we finalize this concept let us have a meeting to informally discuss all the implications of reliability.

H. O. LORENZEN, Head
Countermeasures Branch

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HANDLE VIA
BYEMAN-TALENT-KEYHOLE-CONTROL
CONTROL CENTER ONLY

R. Mayo~~TOP SECRET~~**Command System Audio Tones****4 February 1963**

Frequency	Old Designation	New Designation	Remarks
2395	A	A	
2735	C	C	
3000	B	B	
3300	D	D	
3700	∠	None	Eliminated
3950	J	I	Changed name
4100	β	None	Eliminated (Replaced by I)
4500	∞	J	Changed name
5100	None	None	Eliminated
5250	K	K	
6000	L	L	
6750	M	M	
7500	N	N	May be used in 1964

The above audio tones will provide for all past and present command systems as well as the future digital system.

The command tone generator must provide for either chopped or simultaneous operation of any pair of tone combinations.

To facilitate operation of the digital system, a code wheel should be designed to produce up to eight one-second tone pairs in sequence with one second interval between each pair.

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