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TSG/ESD/TEB-145/71
3 November 1971

MEMORANDUM FOR: IEG/OP/TPB

ATTENTION :

[REDACTED]

SUBJECT :

Proposed Joysticks for [REDACTED] 1540-2 Carriage Drive

1. TEB has evaluated the three "joysticks" submitted by you for consideration as a replacement for the "trim-tab" actuator currently found on the [REDACTED] 1540-2 X-Y motor drive switch. They are all approximately two inches long but of three different shapes and three different materials.

2. Electrical tests have been performed on a light table switch specifically to determine if the use of conductive material for the joystick would create a hazard. No electrical leakage was found so the use of aluminum is considered acceptable.

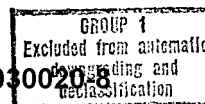
3. We are concerned with the attachment of such a handle to the existing switch shaft. The use of a setscrew to guard against looseness and loss is appropriate but this evaluator considers the wall thickness at the setscrew of the sample aluminum handle to be inadequate. Measurements show that just a little over one and one-half threads are provided in the aluminum wall. This thread successfully withstood a firm tightening test but does not provide a safety margin to offset imperfectly formed threads or a cross-threading situation.

4. In conclusion, we recommended that the wall thickness of the aluminum version be increased to provide more than two full threads for the size 4-40 setscrew, which is adequate. If a plastic material is selected it should have a suitable metal insert as provided in the black plastic sample.

5. The overall dimensions and shape have not been considered in this evaluation. We believe that the three

Declass review by NGA/DoD

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samples provide an adequate variety so that one of them can be selected by your operators on the basis of preference.



Chief, Test & Evaluation Branch
TEB/ESD

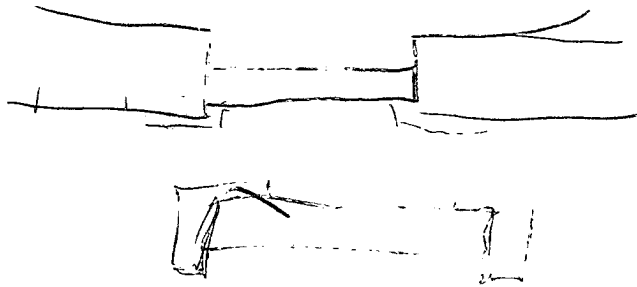
Distribution:

- Original - Addressee
- 1 - RED []
- 1 - DI-8 []
- 1 - Chrono
- 1 - EPB

Attachment:
Samples

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25X1

TRANSMITTAL SLIP		DATE
		3 Nov 1971
TO:		RED
ROOM NO.		
REMARKS:		
.001 - .0005		
		
FROM: TEB/ESD		
ROOM NO.	BUILDING	EXTENSION

FORM NO 241
1 FEB 55

REPLACES FORM 36-8
WHICH MAY BE USED.

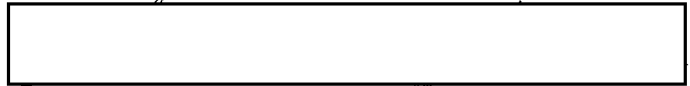
(47)

K-1 thru K-6



TF 154-2C-12V

or



R10-E1-X12-V185

12V dc

Crimp-on pins inserted into shell

✓2	Molex connector	1360R
	2 male pins	1434
	10 female "	1433

✓3 Same as ✓2

✓4	Molex connector	1292 R
	2 male pins	1380
	7 female "	1381