

998435

# CONFIDENTIAL

NPIC/P&DS/D/6-1609  
3 October 1966

MEMORANDUM FOR: Assistant for Photographic Analysis, NPIC

ATTENTION: [redacted]

SUBJECT: [redacted] Stereoviewer Evaluation

1. Effective 15 September 1966, P&DS transferred one [redacted] Stereoviewer to PAG on a temporary loan basis for an operational evaluation.

2. This instrument which is an East German production model originally designed for cartographic work has some unique features and operating characteristics which we feel may have possible application in NPIC film exploitation. A listing of some of these characteristics (Attachment 1) is included for your information.

3. We request that PAG perform an operational evaluation of this equipment from both a technical and a human engineering viewpoint and forward a summary of their recommendations and comments to P&DS by 17 October 1966. An evaluation form (Attachment 2) is included to simplify this process.

4. At the completion of this evaluation it is requested that PAG transfer the stereoviewer to IAD for further evaluation.

[redacted]  
Colonel, USAF

Assistant for Plans and Development, NPIC

- Attachments:
1. Technical Data
  2. List of Evaluation Questions

Distribution:

- Orig & 1 - Addressee
- 3 - P&DS/DB (99843-5)

Declass Review by NGA.

NPIC/P&DS/DB: [redacted] (3 Oct. 1966)

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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ATTACHMENT 1

3 October 1966

TECHNICAL DATA FOR  STEREOVIEWER

STAT

Magnification: 2X to 6X and 5X to 15X

Resolution: 13 l/mm @ 2X, 40 l/mm @ 6X and 100 l/mm @ 13X

Magnification compensation between right and left picture:

with zoom - up to 1:3

with zoom and turret - up to 1:7.5

Field of Stereoscopic View: 200 mm/magnification

Diopter Adjustment: +5

IPD Adjustment: 55 - 75 mm

Illuminated Surface: Incident light - adjustable to 110mm ( $4\frac{1}{2}$ "  
diameter transmitted light - 600 X 300mm (24 x 12")

Optical Image Rotation: 360 degrees

Common displacement of objectives: (Free-hand motion) X axis max  
240mm ( $9\frac{1}{2}$ "  
Y axis max 300mm (12")

Parallel axis motion of objectives: X axis 90-310mm ( $3\frac{1}{2}$  - 12")  
Y axis +65mm ( $2\frac{1}{2}$ "

Operating voltage: 220v 50cy (110v 60cy with transformer)

Power requirement: 250 watts

Dimensions: Width without film holder: 1000mm ( $39\frac{1}{2}$ "  
Width with film holder: 1260mm (50"  
Depth with film holder: 700mm ( $27\frac{1}{2}$ "  
Height with film holder: 1273mm ( $50\frac{1}{2}$ "  
Weight with film holder: 276hg (620 lbs.)

ATTACHMENT 2

TENTATIVE EQUIPMENT EVALUATION FORM

A. Please answer either by checking "Yes", "No", or Not Applicable.

	YES	NO	NOT APPLICABLE
1) Is this piece of equipment satisfactory as is?	_____	_____	_____
2) Does it fulfill a real requirement?	_____	_____	_____
a) Can you now accomplish a new job?	_____	_____	_____
b) An old job easier?	_____	_____	_____
c) An old job faster?	_____	_____	_____
d) An old job more accurately?	_____	_____	_____
3) Would its training time outweigh its eventual advantages?	_____	_____	_____
4) Is equipment comfortable to use?	_____	_____	_____
a) Seating position comfortable?	_____	_____	_____
b) Viewing position comfortable?	_____	_____	_____
5) Does it produce noticeable fatigue?	_____	_____	_____
a) Eye fatigue?	_____	_____	_____
b) Muscular fatigue?	_____	_____	_____
6) Is the intensity of illumination adequate?	_____	_____	_____
a) Is the color of illumination pleasing?	_____	_____	_____
b) Is glare a problem?	_____	_____	_____
7) Is resolution adequate?	_____	_____	_____
a) Is the magnification range broad enough?	_____	_____	_____
8) Is the field of view large enough?	_____	_____	_____
a) Is the image's shape distorted?	_____	_____	_____
b) Is its color aberrated?	_____	_____	_____
9) Is the operating temperature low enough?	_____	_____	_____
10) Is this machine of sufficient durability for its potential working environment?	_____	_____	_____
11) Are the controls satisfactory?	_____	_____	_____
a) Too hard to reach?	_____	_____	_____
b) Too hard to identify?	_____	_____	_____
c) Would you prefer a greater degree of control automation (more buttons rather than handwheels, joysticks, etc.)?	_____	_____	_____
d) A lesser degree?	_____	_____	_____
12) Can the same job be performed better on an existing instrument?	_____	_____	_____
If so, one which one?	_____	_____	_____
13) Is any operation too time-consuming?	_____	_____	_____
If so, which one(s)?	_____	_____	_____
14) Is this instrument too complex?	_____	_____	_____
If so, in what way?	_____	_____	_____
15) Is pointing easy enough?	_____	_____	_____
a) Is the reticle satisfactory?	_____	_____	_____
If not, how not?	_____	_____	_____

B. 1) Please discuss whether or not your objections to this development, if any, are to its total concept or to its specific implementation.  
 2) What essential improvements would you recommend? What alterations, additions or deletions do you think are necessary?