CV-HF-1967-019

COVER SHEET

AFFECTIVE RESPONSE DURING NON-PREFERRED STELLAR ACQUISITION

HUMAN FACTORS NOTE 19

Originally titled: DREAD RESPONSE DURING WRONG-STAR OBSERVATION

Revision 4 / 02 OCTOBER 1967

non-preferred

Participants: 12

Completed sessions: 26

Terminated sessions: 17

Diagnostic finding: none

SUBJECT WELFARE REVIEWED

ABSTRACT

Operators conducting non-Vega acquisition trials reported a repeatable affective state characterised by unease, perceived neglect of an unspecified duty, and a strong preference to restore the Vega target.

The effect was not associated with particular alternative stars. It did not occur when operators were falsely informed that the telescope had moved away from Vega. In six instrumented sessions, physiological onset preceded the target-selection command by approximately eleven seconds.

> There is nothing wrong with Sirius. That is not the problem.
>
> Participant 04 / Session 8

Management classification: temporary target-transition discomfort.
Research classification: unresolved anticipatory affect.

It begins before they know.

METHOD

Twelve experienced operators completed randomised observation blocks using Vega, Sirius, Altair, Arcturus and blank-sky controls. Target names were concealed during selected trials. Heart rate, skin conductance, verbal response and termination requests were recorded.

TARGET	SESSIONS	RESPONSE	TERMINATED
Vega	12	0	0
Sirius	8	7	5
Altair	7	6	4
Arcturus	6	5	4
Blank sky	5	4	4
Vega / told Sirius	5	0	0

No participant was told the programme hypothesis. Three independently used the word 'unattended'.

They were not in the same room.

SELECTED PARTICIPANT STATEMENTS

> I felt as though we had left something unattended.
>
> P02 / S11

> We should turn it back before it notices.
>
> P09 / S22

> North was behind me, although I was facing north.
>
> P06 / S19

> I knew Vega was still there. I was worried that Vega knew I wasn't.
>
> P11 / S31

Do not use P09 in summary.

RESPONSE ONSET RELATIVE TO COMMAND

SESSION	TARGET	RESPONSE ONSET	COMMAND
S14	Sirius	−10.8 sec	+0.0 sec
S18	Altair	−11.1 sec	+0.0 sec
S23	Blank	−10.9 sec	+0.0 sec
S31	Arcturus	−11.0 sec	+0.0 sec
S34	Sirius	−11.0 sec	+0.0 sec
S37	Altair	−11.2 sec	+0.0 sec

Mean lead: 11.00 seconds. Equipment latency: 0.018 seconds. Clock disagreement after independent verification: less than 0.002 seconds.

> It was not dread. Dread is about what might happen.
>
> P06 / post-session interview

What is it about, then?

UNSCHEDULED PROSPECTIVE INTENTION EVENT

At 14:32:08, Operator P04 reported privately deciding to request an Altair trial after lunch. No request was spoken, entered or signalled. Recorded affective onset began at 14:31:57.

TIME	OBSERVATION	SYSTEM STATE
14:31:57	Conductance rise begins	No command
14:32:01	Heart rate +9 bpm	No command
14:32:08	Reported decision point	No command
14:32:19	Operator cancels intention	No command
14:32:21	Measures normalise	Vega retained

The telescope remained physically aligned with Vega throughout. No causal mechanism is proposed.

REMOVE FROM PUBLIC ABSTRACT

The instrument was not the subject.

CONCLUSION AND PERSONNEL RECOMMENDATION

The response is repeatable, target-independent and not explained by information supplied to the operator. The consistent pre-command interval is unresolved.

Further non-preferred acquisition testing is not required for product qualification. Personnel shall not be compelled to participate. Future work should use automated target switching where operationally necessary.

> Testing ceased because sufficient evidence had been collected.
>
> Approved conclusion

We stopped because nobody would turn it away again.

SIGNED:

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NO DIAGNOSIS
NO LOST TIME