OPERATION OF THE COUNTDOWN GROUP

OBJECTIVE:

To familiarize the student with the operation of the countdown group.

EQUIPMENT:

1. Trainer T-501, T-502, or T-502A

INSTRUCTIONS TO STUDENT:

The student will operate the controls of the countdown group. He will analyze faults that the instructor may insert. After each control is operated and/or each sequence is completed, list indications in space provided. Then answer the following questions.

Warmup, Operating Procedure

1. On power distribution panel 1A2A1, turn on the 28V DC, 115V 60 cycle and 200/115V 400 cycle switches.

   Indication:

2. On master programmer panel, turn CONTROL SELECTOR switch to LOCAL AUTO.

   Indications:

3. Depress LAMP TEST pushbutton.

   Indications:

4. Throw MGS switch to ON.

   Indications:

5. After warmup has been completed:

   Indications:

6. What is the purpose of the preceeding steps? Why are they necessary?

7. Assuming that the missile has just been installed and you are readying it for flight, what is the next sequence?

MGS Checkout Procedure

1. Depress INITIATE CHECKOUT pushbutton.

   Indications:

2. MGS Checkout complete

   Indications:

3. What is the purpose of the MGS checkout sequence?

Simulated Countdown Operating Procedure

1. Select target by throwing TARGET SELECTOR switch to A or B, as ordered.

   Indications:

2. Depress INITIATE COUNTDOWN pushbutton switch.

   Indications:

3. COUNTDOWN COMPLETE

Indications:

4. What is the purpose of the COUNTDOWN sequence?

Simulated IGS Inertial Operating Procedure

Depress IGS INERTIAL pushbutton.

INDICATIONS:

Return to Standby Procedure

Depress RETURN TO READINESS pushbutton on master programmer panel.

Indications:

A-CS (IG) Checkout Operating Procedure

1. Depress INITIATE A-CS (IG) CHECK pushbutton on master programmer.

Indications:

2. A-CS checkout complete.

Indications:

3. What is the purpose of the A-CS (IG) checkout sequence?

Questions:

1. What is the purpose of the countdown group?

2. Where are the countdown groups located?

3. What two basic components constitute the countdown group?

4. Name the stepping switches in the countdown group. What is their purpose?

5. Where can a checkout of the IGS be initiated?

6. Where can a countdown be initiated?

7. What sequence must be satisfactorily completed before a checkout can be initiated?

8. What operation must have been satisfactorily accomplished before a countdown can be initiated?

9. When can a red light malfunction occur in the IGS?

10. When can a marginal malfunction occur in the IGS?

11. Can a red light malfunction be overridden in checkout?

12. Can a marginal malfunction be overridden in countdown?

13. What is the level to which a malfunction can be isolated in MGS checkout? Platform c/o? Computer c/o at the LSB? Computer c/o at the SMA?

14. What is the purpose of ACSIG c/o?

15. What is the purpose of MGS c/o?

16. What is the ACS test set used for?

17. Which drawer in the countdown group contains the malfunction patch?

18. What IGS components are necessary for an MGS c/o? Platform c/o? Computer c/o? ACSIG c/o?

19. What check is the ACS test set scheduled for in the P-1 inspection?

20. What is the purpose of the integration test?