

DRY BATTERIES

1. GENERAL

- 1.01 This section describes operating routines for dry batteries.
- 1.02 For general information concerning dry batteries, refer to the section entitled, "Dry Cells and Dry Batteries."
- 1.03 Routine inspection of dry batteries is covered in a section entitled "Dry Cells and Dry Batteries." That section also describes test applicable to dry batteries for which specific tests are not provided elsewhere in the Practices.
- 1.04 Choice between the various routines described in Part 2 should be made with the following considerations in mind:
- (a) Where the circuit drawing or other information relating to the particular circuit specifies the routine to be followed, be guided by those instructions.
 - (b) Grid batteries or other batteries subject to practically no drain should be operated in accordance with (C) or (D), except where only a few small batteries are involved and suitable testing equipment is not available. In the latter case, (E) may be followed.
 - (c) Batteries subject to appreciable drain, whether steady or variable, should ordinarily be operated in accordance with (A) or (B). (A) will generally be preferable for batteries composed of individual cells, while (B) is often advantageous for batteries composed of battery blocks.
 - (d) As between methods which are optional in the light of the above considerations, choose that which appears most advantageous in view of local conditions or which experience has proved most satisfactory.
- 1.05 For batteries operated in accordance with (A), (B), (C), or (D) of Part 2, routine maintenance should be scheduled

under the appropriate section number, rather than under the number of this section. For batteries operated in accordance with (E) of Part 2, routine replacements should be scheduled under the number (E).

1.06 The interval between scheduled tests of dry batteries maintained in accordance with (A), (B), (C), or (D) of Part 2 should be so chosen as to result in the greatest over-all economy consistent with preservation of a reasonable margin of safety against failure. In general, the shorter the interval between tests, the greater will be the proportion of the battery capacity which may be used without danger of failure.

1.07 The interval between scheduled replacements of batteries maintained in accordance with (E) of Part 2 should be as long as possible consistent with preservation of a reasonable margin of safety against failure.

2. PROCEDURES

(A) Routine with Variable Number of Cells and Individual Replacements

2.01 Test the battery periodically. When the test requirements are not met, adjust the battery to meet the requirements, if possible, by disconnecting cells or connecting additional cells (changing taps on battery blocks).

2.02 If the test requirements for the battery as a whole cannot be met by disconnecting cells or connecting additional cells, test the individual cells or battery blocks, and bring the battery within requirements by replacing the cells or battery blocks nearest depletion or below an established cut-off point.

(B) Routine with Variable Number of Cells and Complete Replacement of Battery

2.03 Test the battery periodically. When the test requirements are not met,

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adjust the battery to meet the requirements, if possible, by disconnecting cells or connecting additional cells (changing taps on battery blocks).

2.04 If the test requirements cannot be met by disconnecting cells or connecting additional cells, replace the entire battery.

(C) Routine with Fixed Number of Cells and Individual Replacements

2.05 Test the battery periodically. When the test requirements for the battery as a whole are not met, test the individual cells or battery blocks, and bring the bat-

tery within requirements by replacing the cells or battery blocks nearest depletion or below an established cut-off point.

(D) Routine with Fixed Number of Cells and Complete Replacement of Battery

2.06 Test the battery periodically. When the test requirements are not met, replace the entire battery.

(E) Routine for Periodic Replacement of Battery without Test

2.07 Replace the entire battery, without test at intervals as specified locally.