This Breakout Box P/N 13600 was developed by Aeronautical Instrument and Radio Company for trouble shooting the "P.C. Boards" of the Government Type Horizontal Simulation Indicator ID-2103. The Breakout Box P/N 13600 consists of a Test Jig, and interface cables which will connect the ID-2103 to our Multi-Indicator Test Set P/N MIT-234C. This design provides component level identification of any/all defective electronic components on the following separate repairable assemblies (SRA):

- Circuit Card Assy, Logic Electronics.
- Circuit Card Assy, Range Electronics.
- Circuit Card Assy, Bearing Electronics.
- Circuit Card Assy, Servo Amplifier.

The Test Jig provides the means to mount a ID-2103 indicator to the Test Jig with the case removed. The indicator is fixed such that the face of the indicator can be viewed easily when the "Breakout Box" is in operation. The five P.C. boards listed above normally are situated within the ID-2103, which is mounted in the Test Jig.
The Test Jig has the means to externally mount each P.C. board such that all circuits are accessible for test. For each P.C. Board the “mount” will include a connector mounting to the P.C. board connector. This connector will be wired to active pins of the mounting connector to a “second” connector on the far end of this cable.

The “second” connector shall be fitted with a “handle” permitting the tester to make the connection to the connector in the ID-2103 without the need to remove nearby boards.

A defective ID-2103 is tested with all P.C. boards normally positioned within the indicator. The MIT-234C Test Set is applied to the ID-2103 to determine the area of malfunction to be corrected. Particularly the failures to be addressed are those residing in the five P.C. boards listed in the first paragraph of this introduction. Referring to the manual Depot Maintenance Requirement CECOM-DMWR per ID-2103, evaluate the performance of the unit under test (UUT).

The results from the tests will point out the areas of failure in the P.C. boards or in other electronic component assemblies. In particular the failures located in the P.C. Boards are to be evaluated and corrected as described in the following sections and paragraphs.

**DIMENSIONS**

- **Length** = 20.38”
- **Width** = 19.38”
- **Height** = 8.63”
- **Weight** = 40Lbs