

*Test procedure used by ANAD  
copy given to Bill Huelson L.E.  
10-7-87*

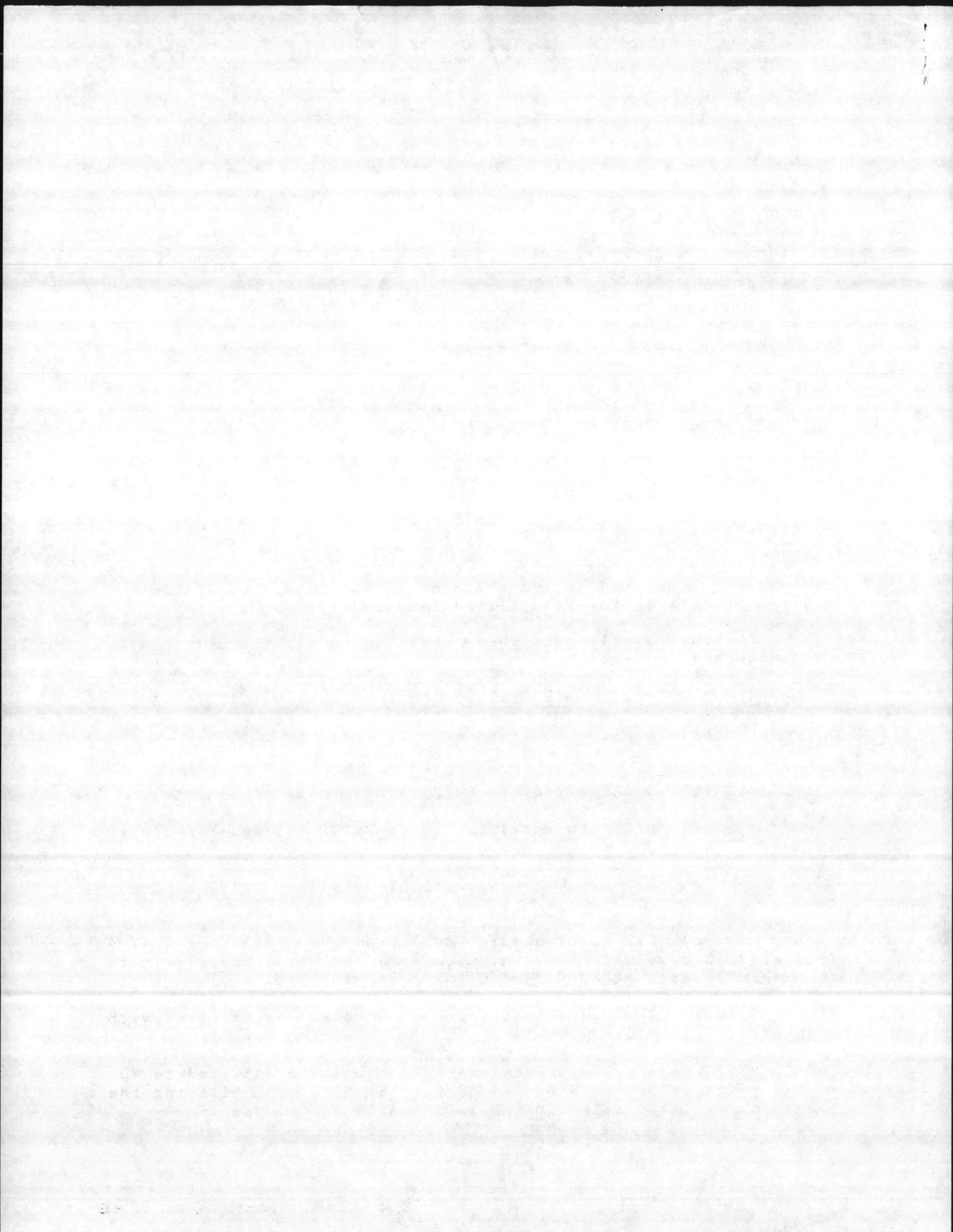
*Copy to John Dason*

TEST PROCEDURE FOR BENDIX GENERATOR (650 Amp)  
FOR M1 TANK (P/N 12273135)  
(Code B)

1. Test Conditions.

a. Unless otherwise specified, each test shall be made under the following conditions:

- (1) Test shall be run in the order indicated.
- (2) Rotation of the Generator shall be clockwise when viewed from the anti-drive end.
- (3) Voltage regulator, part number 12273246-1, shall be used for the test in paragraph 4.
- (4) Use batteries (6TN or equivalent) for test performed in paragraph 4.
- (5) "VPOR" indicates "voltage at point of regulation. VPOR shall be 28 +/- 0.75 volt DC for test in paragraph 4.
- (6) "LA" indicates "line amps". Line amps are measured on the ammeter connected to output terminal B. Line amps shall be 650 +/- 10 amperes for test listed in paragraph 4.
- (7) During all tests there shall be no visible oil leakage from external surfaces.
- (8) Supply oil (MIL-L-23699) to the generator as follows:
  - (a) Oil In Temperature (OIT) shall be 225°F +/- 5°F.
  - (b) Oil In Pressure (OIP) shall be 12 +/- 1 psig.
  - (c) Oil flow shall be 2.85 to 6.00 gallons-per-minute (GPM).
  - (d) Oil Out Temperature (OOT) shall be 325°F maximum.
  - (e) Oil Out Pressure (OOP) from pump shall be 40 +/- 4 psig at 2000 revolutions-per-minute (rpm) and will increase (not to exceed 90 psig at 8000 rpm) with increasing rpm.
  - (f) The oil into the generator shall be filtered with a 40 micron oil filter.
- (9) Generator Case Pressure (GCP) shall be adjusted to 70 +/- 10 psig at 2000 and 150 +/- 10 psig at 8000 rpm utilizing the pressure regulator valve in the self-contained oil pump.



2. Field Resistance Test. Using a digital multimeter, measure the field resistance between terminals A and C on the J2 connector with the Generator not operating.

3. Hookup.

a. Mount the Generator on drive stand with longitudinal axis in a horizontal position. The longitudinal axis is an imaginary line running thru the center of the armature from drive end to anti-drive end.

b. Connect oil supply, pump, meters, filters, pressure regulators, pressure gages and temperature gages.

c. Install a gage to monitor Generator Case Pressure (GCP).

d. Connect a set of batteries to output terminals B and E.

e. Connect voltage regulator, relay, load bank and meters.

4. Operational Test.

a. Verify proper oil flow and pressures when operating Generator at 2000 rpm. Check Generator Case Pressure (GCP) and adjust if necessary and insure proper oil flow.

b. Operate Generator at 2400 rpm and 500 amps load for 5, 11, 0 minutes and record VPOR and LA. VPOR and LA shall be 28 +/- 0.75 volts DC and 500 +/- 10 amperes respectively. Current output shall be 4.25 amps or less. Check GCP.

c. Operate Generator at 8000 rpm and 650 amps load for 10, +1, -0 minutes and record VPOR and LA. VPOR and LA shall be 28 +/- 0.75 volts DC and 650 +/- 10 amperes respectively. Current output shall be 3.15 amps or less. Check GCP and adjust if necessary and insure proper oil flow.

