# 1.22_V2.0 TURN ON PRESSURE TRANSDUCERS A & B

*Last Revised: June 23,1999*
**Filename: xdcr_ab_on**

## BRIEF FUNCTIONAL DESCRIPTION:

The ACIS internal pressure should reach a very low, perhaps unmeasurable, value once the little vent valve has been opened for more than 3 hours. Nevertheless, it will be useful to verify this state early in the mission. The transducers may be turned on and valid pressure readings may be received with both sides of the DPA and the DEA off. However, if one side of the DPA is on, the verifiers indicating that the transducers are on will be valid. It is expected that this procedure will be used during transfer orbit.

The sequence of actions will be:

1. turn on the pressure transducer A & B
2. measure the pressure

## ASSUMED INSTRUMENT STATE:
Assumes that the PSMC has power from the spacecraft.

## SPECIAL INITIAL CONDITIONS:
Assumes that *AXAF* ISIM RCTU is powered on and in telemetry format 1, 2, or 4.

## OPERATIONAL CONSTRAINTS/CAUTIONS:
ACIS-C-002

## REFERENCES:

## CHANGE HISTORY:

### V2.0

- ACIS Team signed-off version
- changed required telemetry format to 1,2,4 or 6
- added units of minutes (m) to the Time Req column

Table 1: **Turn on Pressure Transducers A & B**

| Step # | Title (Revision 1.22_V2.0) | Time Req(m) | Command Description | Command Mnemonic | Telemetry Description | Telemetry Mnemonic | Expected Value | Units |
|---|---|---|---|---|---|---|---|---|
| 1.0 | Measure Pressure | | | | | | | |
| 1.1 | turn on Pressure Transducer A | 0.1 | XDCR A on | 1PRESAON | Pressure XDCR A | 1PRDBAON | ON | |
| 1.2 | turn on Pressure Transducer B | 0.1 | XDCR B on | 1PRESBON | Pressure XDCR B | 1PRDBBON | ON | |
| 1.3 | Measure Pressure A | 2.0 | | | Differential Housing Pressure A | 1HOPRAPR | $0 \pm 2$ | T |
| 1.4 | Measure Pressure B | | | | Differential Housing Pressure B | 1HOPRBPR | $0 \pm 2$ | T |
| | Total Time | 2.2 | | | | | | |

Table 2: (CONT) **Turn on Pressure Transducers A & B**

| Step # | Telemetry EGSE | Other Verifier | Crit | Description | Notes | RT Con | Tlm Fmt | Min Alt | SIM Pos |
|---|---|---|---|---|---|---|---|---|---|
| 1.0 | | | | | | | | | |
| 1.1 | | | 2 | | verifiers only valid if one | | 1,2,4 or 6 | | |
| 1.2 | | | 2 | | side of the DPA is on | | 1,2,4 or 6 | | |
| 1.3 | | | 1 | | | | 1,2,4 or 6 | | |
| 1.4 | | | 1 | | | | 1,2,4 or 6 | | |
| | | | | | | | | | |