

3.3.1.2.2 Elevation Calibration

In addition to the normal inclinometer calibration items, two elevation resolver calibration items are included.

```
REF_V:1.69 OFF: 0.0          CONFIG-ELEV
DOWN: 0   UP: 90.0   SF:50.00
LOOK:1   RES: 0.0   REV:0
SET REFERENCE VOLTAGE <0.50 - 3.50>
```

RES: ELEV RESOLVER OFFSET<+/-300.00 DEGREES>

The elev_resolver_offset configuration item defines the offset to be applied to the angle read directly from the elevation resolver for the purpose of displaying elevation angle. Example: If when at the elevation reference (stow) position the raw elevation resolver angle reads 122.3, a elev_resolver_offset of -100.0 will result in a resolver based elevation angle of 22.3.

NOTE: the resolver-based angle is displayed in MANUAL mode when the elevation DOWN limit is active.

REV: ELEV RESOLVER<0-NORMAL 1-REVERSED>

The elev_resolver_reversed configuration item defines whether the polarity of the elevation resolver matches that of the RC3000 resolver circuitry. If the raw elevation resolver angle decreases as the mount moves up, the elev_resolver_reversed item must be described as reversed.

3.3.1.2.3 Azimuth Calibration

In addition to the normal azimuth calibration items, two azimuth resolver calibration items are included. No azimuth reference_voltage item is displayed since no azimuth potentiometer is present.

```
OFF: 0.0          CONFIG-AZIM
CCW:180   CW:180
RES: 0.0 REV:0
SET REFERENCE VOLTAGE <2.00 - 3.00>
```

RES: AZIM RESOLVER OFFSET<+/-300.00 DEGREES>

The azim_resolver_offset configuration item defines the offset to be applied to the angle read directly from the azimuth resolver for the purpose of displaying azimuth angle. Example: If when at the azimuth stow position the raw azimuth resolver angle reads 181.3, a azim_resolver_offset of -181.3 will result in a resolver based azimuth angle of 0.0.

REV: ELEV RESOLVER<0-NORMAL 1-REVERSED>

The elev_resolver_reversed configuration item defines whether the polarity of the elevation resolver matches that of the RC3000 resolver circuitry. If the raw elevation resolver angle decreases as the mount moves up, the elev_resolver_reversed item must be described as reversed.

3.3.2.1 Analog to Digital Voltages

In addition to the normal voltages displayed this screen also shows “raw resolver” angles and counts.

AZ: 1.114	181.30	33004	AD VOLTAGES
EL: 1.143	1	122.30	22264 22.3 L1:0
POL:2.237			L2:1
SIG: 3.756 (1)	<1>RF	<2>SS1	<3>SS2 <4>GND

The azimuth and elevation resolver angles and counts displayed are read directly from the resolvers without being biased by offset terms. NOTE: The displayed values will reflect if the azimuth or elevation resolver polarity has been reversed.

As an aid in calibrating the elevation resolver, the angle resulting from applying offset and reverse factors is also displayed.