POS M/V GAMS CAL

Standard
Operating
Procedure

NOAA Ship THOMAS JEFFERSON
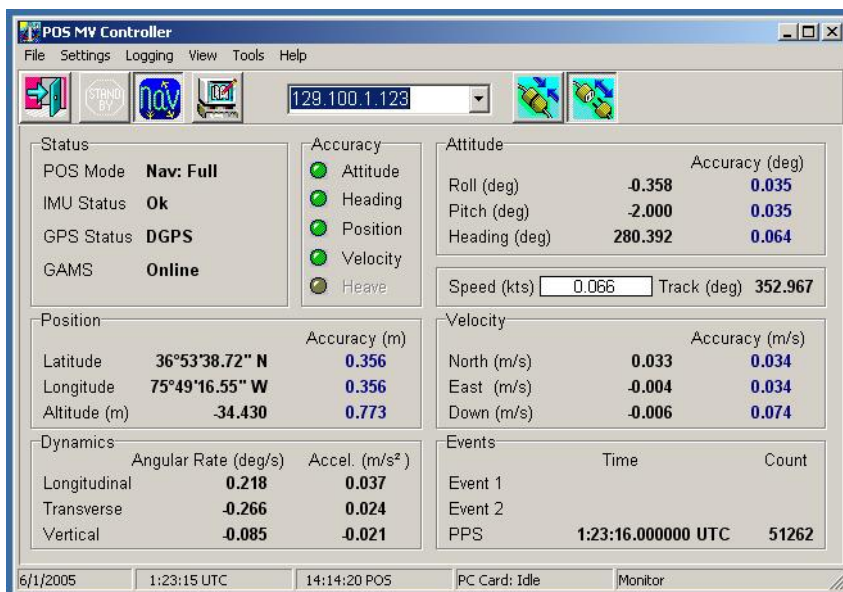
Document History		
Version	*Date Approved*	*Initials*
1.0		

Introduction

This brief write up is a simplified procedure for conducting a GAMS calibration on any of the three POS M/V 320 v4's aboard THOMAS JEFFERSON. For more detailed explanations consult the latest manual available.
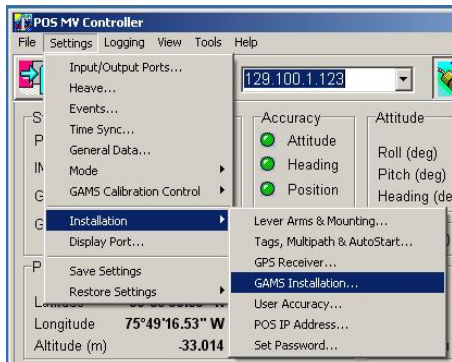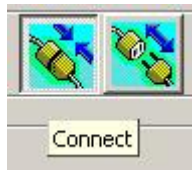
PART I – INSTALLATION/SETUP

Ensure that the correct settings are in place for normal POS operations including:
Correct multipath environment setting selected
Correct lever-arm offsets are entered
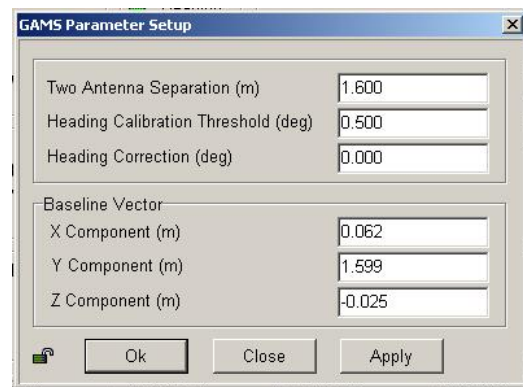Receiving differential correctors
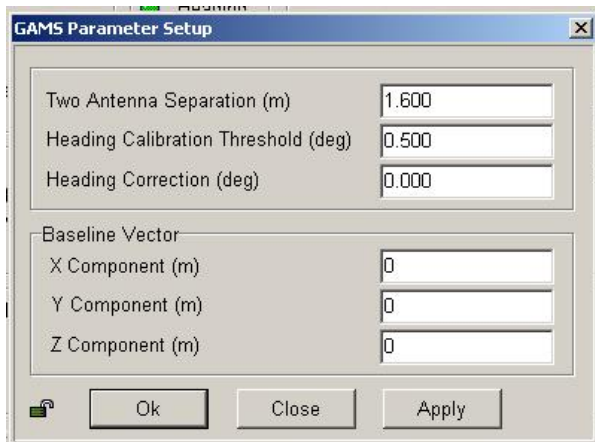
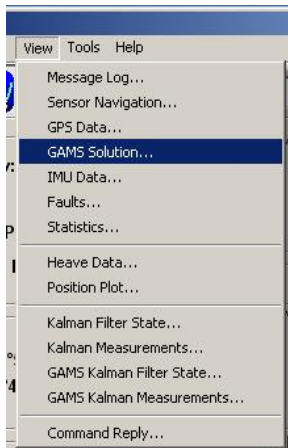## PART II – GAMS CALIBRATION

Connect to the POS M/V

Select *GAMS Installation* from *Settings/Installation/GAMS Parameter Setup/* menu.
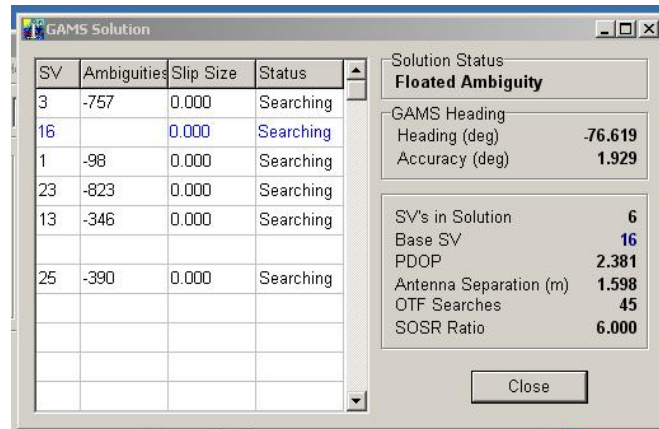

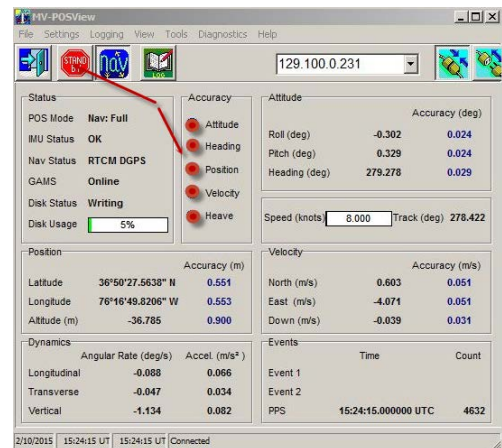Zero out the Baseline Vector X, Y, and Z components.

Select *GAMS Solution* under the View menu. Keep this sub-window up during the calibration procedure. Note that the *GAMS Heading Accuracy* must be below the entered *Heading Calibration Threshold*, the PDOP must be below 3.0 and there must be 5 common satellites between the two antennas for the POS to initialize the GAMS calibration procedure.
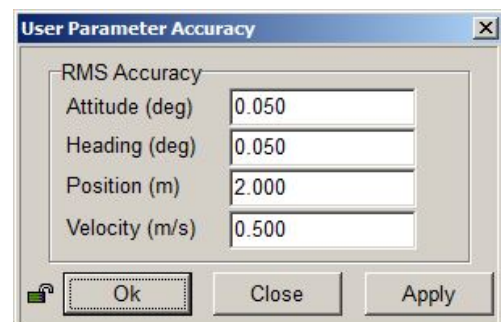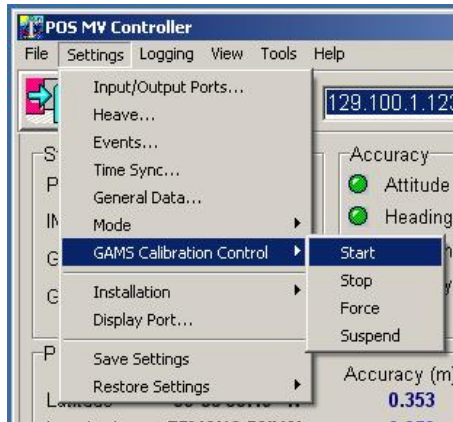
Press the Stand By button located under the menus bar. This will zero out all of the attitude readings as well as turn the Accuracy lamps to red.

Press the NAV button located to the right of the Stand By button. This will turn your status and attitude sensors back, turning the Accuracy lamps back to green (lamps may not turn green, this is okay). It will also place your accuracy settings at the lowest/default settings, resulting in Accuracy degrees of 55+.

Set the User Parameter Accuracy values as follows; Attitude 0.050, Heading 0.050, Position 2.000, Velocity 0.500.

Once all of these requirements have been met start the GAMS calibration procedure by selecting *Start* under the *Settings/GAMS Calibration Control* menu.

Once the GAMS status displays CAL Requested begin aggressive S and figure 8 turns at high speed. Once the GAMS status changes to CAL in Progress steer in a straight line until the GAMS status changes to CAL complete.

PART III – SAVING SETTINGS AND OBSERVATIONS

Once the GAMS calibration is complete, select Stop from the *Settings/GAMS Calibration Control menu*.

Select *Save Settings* under the *Settings* menu.

Select *Store POS Settings* from the *File* menu and save the file with an appropriate name (i.e. 1005_D304_postGAMS_060105). Save in a local directory that already have other configuration files saved for the POS.

Observe the POS GAMS status information. It should stay on Online, with occasional switches to Ready Online. If the GAMS status with goes to Not Ready, or stays on Ready Online, then something may be wrong.