To prepare a PolaRx5 receiver for deployment with a UNACO based configuration perform the following steps. You will need to have the RxTools software package installed with a basic understanding of its operation. We will be using RxControl with the 'Expert Console' open to watch for errors. This process will work on Windows 7 and later or Fedora15 and later. Most current browsers work well however problems have been reported when using Safari. If you use Safari to log in you will need to check the 'Save this password in my keychain' dialog box. For a detailed look at the configuration process see the complete guide Unav_PolaRx5_setup. A copy of the latest version of RxTools can be found at http://www.septentrio.com/support. Users can request credentials by e-mailing support@septentrio.com

-Connect to the receiver using the COM1 serial connection. Use cable CBLe_COM_1.8 p/n 200416 to a serial port or use a serial to usb adaptor.

-If the receiver has been previously configured it should be cleaned up.
    -To reset configuration to default.
    GoTo 'File > Reset Receiver'
        Select 'All' and 'OK'.
    The Ethernet configuration is not reset with this command.
    -To format the internal or external disk.
    GoTo 'Logging > Disk Management'
        Select appropriate disk, 'Format' and 'OK'.

-Load the script UNAV_X5_5-0-1_base_001.txt to the rcvr. The script can be downloaded from UNAVCO or you can paste the configuration text found below into a separate text file. This file will set up everything on the receiver except the user credentials and site metadata. The IP will be set to 192.168.1.2.
Once the configuration is loaded the IP can be changed for specific site requirements using the web GUI > Communications > Ethernet or RxControl > Communications > Network Settings. Changes to network setting do not take effect until a reboot is performed.

-If this receiver is being set up for PBO installation you will need to install PBO_X5_5-0-1_user-admin_001.txt for user credentials. The two scripts can be combined by appending the user credentials file to the end of the base file.
If using credentials other than PBO go to web GUI > Admin > User Administration or RxControl > File > User Management to create users and set passwords.

-Site metadata will be updated in during installation.

Unav_PolaRx5_Quick-Start v1.0 5/19/16 WG

**UNAV_X5_5-0-1_base_001.txt**

# Review and comment out sections such as # Metadata or # Set receiver IP.
# If the receiver has already been configured it is recommended you reset the receiver to
        default and format the internal drive.
# Save data before reformatting.

# Setup streams
setSBFOutput, Stream1, LOG1
setSBFOutput, Stream2, LOG2
setSBFOutput, Stream3, LOG3
setSBFOutput, Stream4, LOG4
setSBFOutput, Stream8, LOG8
setSBFOutput, Stream16, IPS1
setSBFOutput, Stream1, ,
        MeasEpoch+GPSNav+GPSIon+GPSUtc+GLONav+GALNav+GALUtc+GALGstGps+
        GEONav+PVTGeodetic+ReceiverSetup+CMPNav+QZSNav+ASCIIIN
setSBFOutput, Stream2, ,
        MeasEpoch+GPSNav+GPSIon+GPSUtc+GLONav+GALNav+GALUtc+GALGstGps+
        GEONav+PVTGeodetic+ReceiverSetup+CMPNav+QZSNav
setSBFOutput, Stream3, ,
        MeasEpoch+GPSNav+GPSIon+GPSUtc+GLONav+GALNav+GALUtc+GALGstGps+
        GEONav+PVTGeodetic+ReceiverSetup+CMPNav+QZSNav
setSBFOutput, Stream4, ,
        MeasEpoch+GPSNav+GPSIon+GPSUtc+GLONav+GALNav+GALUtc+GALGstGps+
        GEONav+PVTGeodetic+ReceiverSetup+CMPNav+QZSNav+ASCIIIN
setSBFOutput, Stream8, ,
        MeasEpoch+MeasExtra+EndOfMeas+OutputLink+GPSRawCA+GPSRawL2C+GPS
        RawL5+GLORawCA+GALRawFNAV+GALRawINAV+GALRawCNAV+GEORawL1+
        GEORawL5+GPSNav+GPSAlm+GPSIon+GPSUtc+GLONav+GLOAlm+GLOTime+G
        ALNav+GALAlm+GALIon+GALUtc+GALGstGps+GEONav+GEOAlm+BaseVectorGe
        od+PVTGeodetic+PosCovGeodetic+DOP+EndOfPVT+ExtEvent+DiffCorrIn+BaseSt
        ation+InputLink+ChannelStatus+ReceiverStatus+ReceiverSetup+Commands+CMP
        Raw+IPStatus+QZSRawL1CA+QZSRawL2C+QZSRawL5+PVTSupport+CMPNav+
        QualityInd+NTRIPClientStatus+WiFiAPStatus+RxComponents+DiskStatus+RFStatu
        s+IRNSSRaw+QZSNav+WiFiClientStatus+LogStatus+RxMessage
setSBFOutput, Stream16, ,
        MeasEpoch+GPSNav+GPSIon+GPSUtc+GLONav+GALNav+GALUtc+GALGstGps+
        GEONav+PVTGeodetic+ReceiverSetup+CMPNav+QZSNav

```
setSBFOutput, Stream1, , , sec15
setSBFOutput, Stream2, , , sec1
setSBFOutput, Stream3, , , msec200
setSBFOutput, Stream4, , , sec15
setSBFOutput, Stream8, , , min2
setSBFOutput, Stream16, , , sec1

# Setup Met/Tilt
setDataInOut, COM2, ASCIIIN
setPeriodicEcho, COM2, 'A:0R0%%CR%%LF'
setPeriodicEcho, COM2, , min5
setCOMSettings, COM2, baud19200

#Set up server port 42042 for stream
setIPServerSettings, IPS1, 42042

# Position
setPVTMode, Static

# Tracking
setMultipathMitigation, off
setMultipathMitigation, , off
setSatelliteUsage,
      G01+G02+G03+G04+G05+G06+G07+G08+G09+G10+G11+G12+G13+G14+G15+
      G16+G17+G18+G19+G20+G21+G22+G23+G24+G25+G26+G27+G28+G29+G30+
      G31+G32+R01+R02+R03+R04+R05+R06+R07+R08+R09+R10+R11+R12+R13+R
      14+R15+R16+R17+R18+R19+R20+R21+R22+R23+R24+R25+R26+R27+R28+R29
      +R30+E01+E02+E03+E04+E05+E06+E07+E08+E09+E10+E11+E12+E13+E14+E1
      5+E16+E17+E18+E19+E20+E21+E22+E23+E24+E25+E26+E27+E28+E29+E30+E
      31+E32+S120+S121+S122+S123+S124+S125+S126+S127+S128+S129+S130+S1
      31+S132+S133+S134+S135+S136+S137+S138+S139+S140+S141+S142+S143+S
      144+S145+S146+S147+S148+S149+S150+S151+S152+S153+S154+S155+S156+
      S157+S158+C01+C02+C03+C04+C05+C06+C07+C08+C09+C10+C11+C12+C13+
      C14+C15+C16+C17+C18+C19+C20+C21+C22+C23+C24+C25+C26+C27+C28+C2
      9+C30+C31+C32+C33+C34+C35+C36+C37
setSignalUsage,
      GPSL1CA+GPSL1PY+GPSL2PY+GPSL2C+GPSL5+GLOL1CA+GLOL2CA+GLOL3
      +GALL1BC+GALE6BC+GALE5a+GALE5b+GALE5+GEOL1+GEOL5+CMPL1+CMP
      E5b+CMPB3
setSignalUsage, ,
      GPSL1CA+GPSL1PY+GPSL2PY+GPSL2C+GPSL5+GLOL1CA+GLOL2CA+GLOL3
      +GALL1BC+GALE6BC+GALE5a+GALE5b+GALE5+GEOL1+GEOL5+CMPL1+CMP
      E5b+CMPB3+QZSL1CA+QZSL2C+QZSL5
setSignalTracking,
```

```
          GPSL1CA+GPSL1PY+GPSL2PY+GPSL2C+GPSL5+GLOL1CA+GLOL2CA+GLOL3
          +GALL1BC+GALE6BC+GALE5a+GALE5b+GALE5+GEOL1+GEOL5+CMPL1+CMP
          E5b+CMPB3+QZSL1CA+QZSL2C+QZSL5+IRNL5
setNotchFiltering, Notch1, off
setNotchFiltering, Notch2, off
setNotchFiltering, Notch3, off

# Clock
setClockSyncThreshold, ClockSteering
setREFOUTMode, off

# Metadata
setAntennaOffset, Main, , , 0.0083
setAntennaOffset, Main, , , , 'TRM59800.00     SCIT'
setMarkerParameters, 'pnnn'
setMarkerParameters, , 'pnnn'
setMarkerParameters, , , 'pnnn'
setMarkerParameters, , , , 'pnnn'
setMarkerParameters, , , , , , , 'USA'
setObserverParameters, 'UNAVCO'
setObserverParameters, , 'UNAVCO'

# Setup sessions
setLogSession, LOG1, Enabled
setLogSession, LOG2, Enabled
setLogSession, LOG3, Enabled
setLogSession, LOG4, Enabled
setLogSession, LOG8, Enabled
setLogSession, LOG1, , , 'A'
setLogSession, LOG2, , , 'B'
setLogSession, LOG3, , , 'C'
setLogSession, LOG4, , , 'M'
setLogSession, LOG8, , , 'STATUS'
setLogSession, LOG1, , , , After1Year
setLogSession, LOG2, , , , After30Days
setLogSession, LOG3, , , , After7Days
setLogSession, LOG4, , , , After3Days
setLogSession, LOG8, , , , After30Days
setLogSession, LOG1, , , , , High
setLogSession, LOG2, , , , , High
setLogSession, LOG3, , , , , High
setLogSession, LOG4, , , , , High
setLogSession, LOG8, , , , , Medium
setFileNaming, LOG1, IGS24H
```

```
setFileNaming, LOG2, IGS1H
setFileNaming, LOG3, IGS1H
setFileNaming, LOG4, IGS1H
setFileNaming, LOG8, IGS24H

# Set receiver IP
setIPSettings,Static,192.168.1.2,255.255.255.0,192.168.1.1

# copy config to Boot and User1
exeCopyConfigFile,Current,Boot
exeCopyConfigFile,Current,User1
#exeCopyConfigFile,RxDefault,User2
```

**PBO_X5_5-0-1_user-admin_001.txt**
**You must edit the login un/pw for this script to work!**

```
# Setup PBO Login Credentials
setUserAccessLevel, User1, 'pbo'
setUserAccessLevel, User1, , '8CODZDSFGI3FZS1TX1EQ62A98UR'

# Login to complete changes
login, un, pw

setUserAccessLevel, User2, 'unavco'
setUserAccessLevel, User2, , '814VI4ROF77L3QZ1ZDXFLOZPZU2'
setDefaultAccessLevel, Viewer
setDefaultAccessLevel, , Viewer
setDefaultAccessLevel, , , Viewer
setDefaultAccessLevel, , , , Viewer
setDefaultAccessLevel, , , , , Viewer

# copy config to Boot
exeCopyConfigFile,Current,Boot
exeCopyConfigFile,Current,User1
```