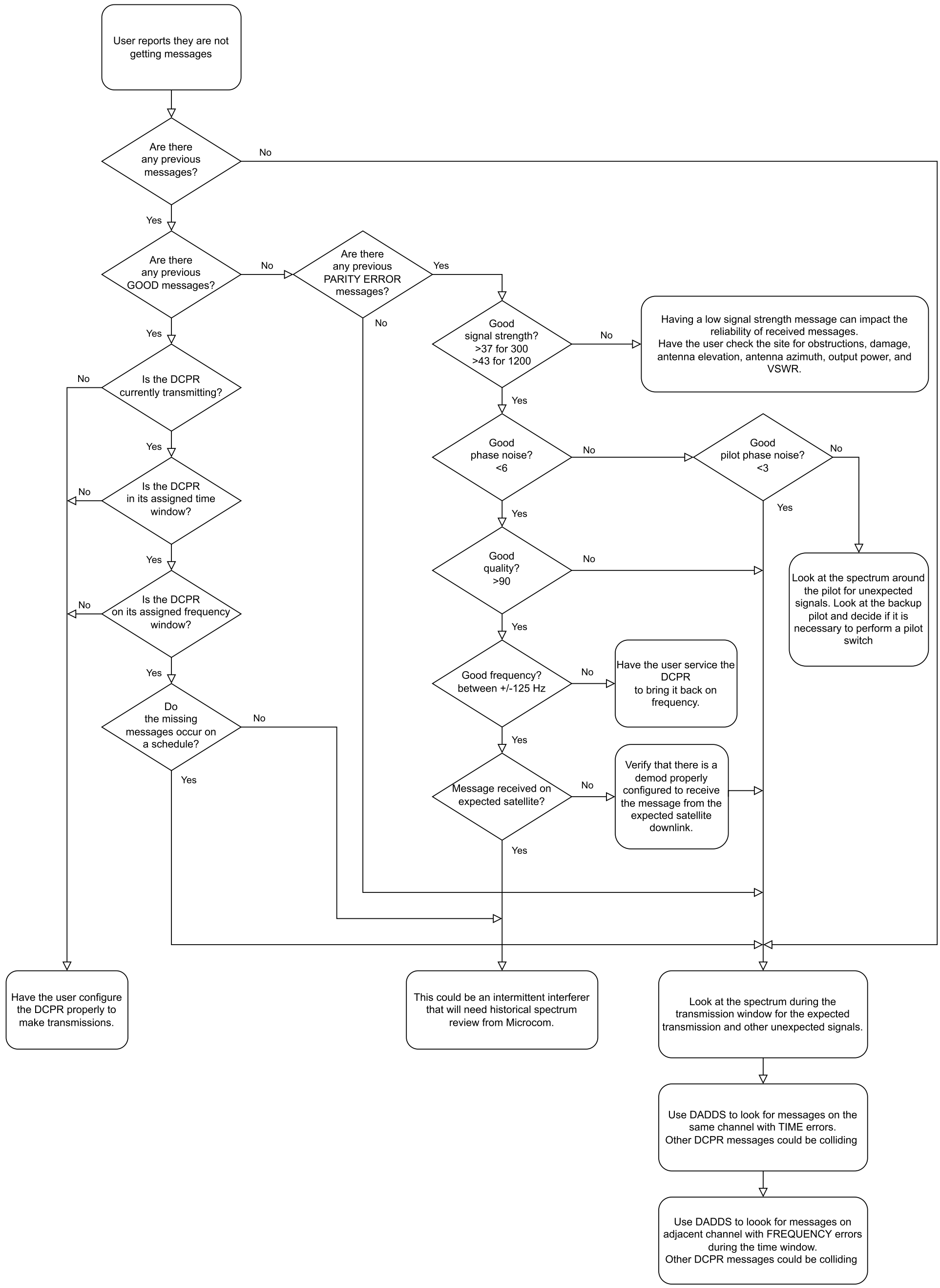
User reports they are not getting messages
Are there any previous messages?
No
Yes
Are there any previous GOOD messages?
No
Yes
Are there any previous PARITY ERROR messages?
Yes
No
Good signal strength? >37 for 300 >43 for 1200
No
Having a low signal strength message can impact the reliability of received messages. Have the user check the site for obstructions, damage, antenna elevation, antenna azimuth, output power, and VSWR.
Yes
Good phase noise? <6
No
Good pilot phase noise? <3
No
Yes
Yes
Good quality? >90
No
Look at the spectrum around the pilot for unexpected signals. Look at the backup pilot and decide if it is necessary to perform a pilot switch
Yes
Good frequency? between +/-125 Hz
No
Have the user service the DCPR to bring it back on frequency.
Yes
Message received on expected satellite?
No
Verify that there is a demod properly configured to receive the message from the expected satellite downlink.
Yes
Yes
Is the DCPR currently transmitting?
No
Yes
Is the DCPR in its assigned time window?
No
Yes
Is the DCPR on its assigned frequency window?
No
Yes
Do the missing messages occur on a schedule?
No
Yes
Have the user configure the DCPR properly to make transmissions.
This could be an intermittent interferer that will need historical spectrum review from Microcom.
Look at the spectrum during the transmission window for the expected transmission and other unexpected signals.
Use DADDS to look for messages on the same channel with TIME errors. Other DCPR messages could be colliding
Use DADDS to loook for messages on adjacent channel with FREQUENCY errors during the time window. Other DCPR messages could be colliding