From: **Eric Wachsmann** eric@flex-radio.com
Subject: Re: Inquiry From: douglas.adams@me.com
Date: March 10, 2016 at 1:06 PM
To: Doug Adams douglas.adams@me.com

EW

If Auto is turned on, then this value is pulled out of the newest waterfall tile that was sent.

Code snippet:
===========================

```
// Check AutoBlackLevel
                if (_autoBlackLevelEnable && _fallIsLive && (_fallAutoLowThreshold !=
newest_tile.AutoBlackLevel))
                    {
                        _fallAutoLowThreshold = (ushort)newest_tile.AutoBlackLevel;
                        UpdateAutoColorDynamicRange();
                    }
```

On Thu, Mar 10, 2016 at 11:59 AM, Doug Adams <douglas.adams@me.com> wrote:
Eric,

I have the Waterfall code working in Swift on OS X but I have one question.

Where does _fallAutoLowThreshold come from? I don't see anywhere in your code that sets it.

I can see that it is used here:

```
private void UpdateAutoColorDynamicRange()
    {
        _fallAutoHighThreshold = CalculateHighThreshold(_fallAutoLowThreshold);
        // force a redraw since we have changed color parameters
        KickRenderWaterfall();
    }
```

to calculate _fallAutoHighThreshold.

Originally I thought that the API Waterfall black_level value was being changed whenever auto_black changed but I've watched (with Wireshark) and don't see the black_level parameter change when I change the Auto pushbutton (which changes the value of auto_black and sends the new value to the radio hardware). I'm missing something.

Thanks,

Doug