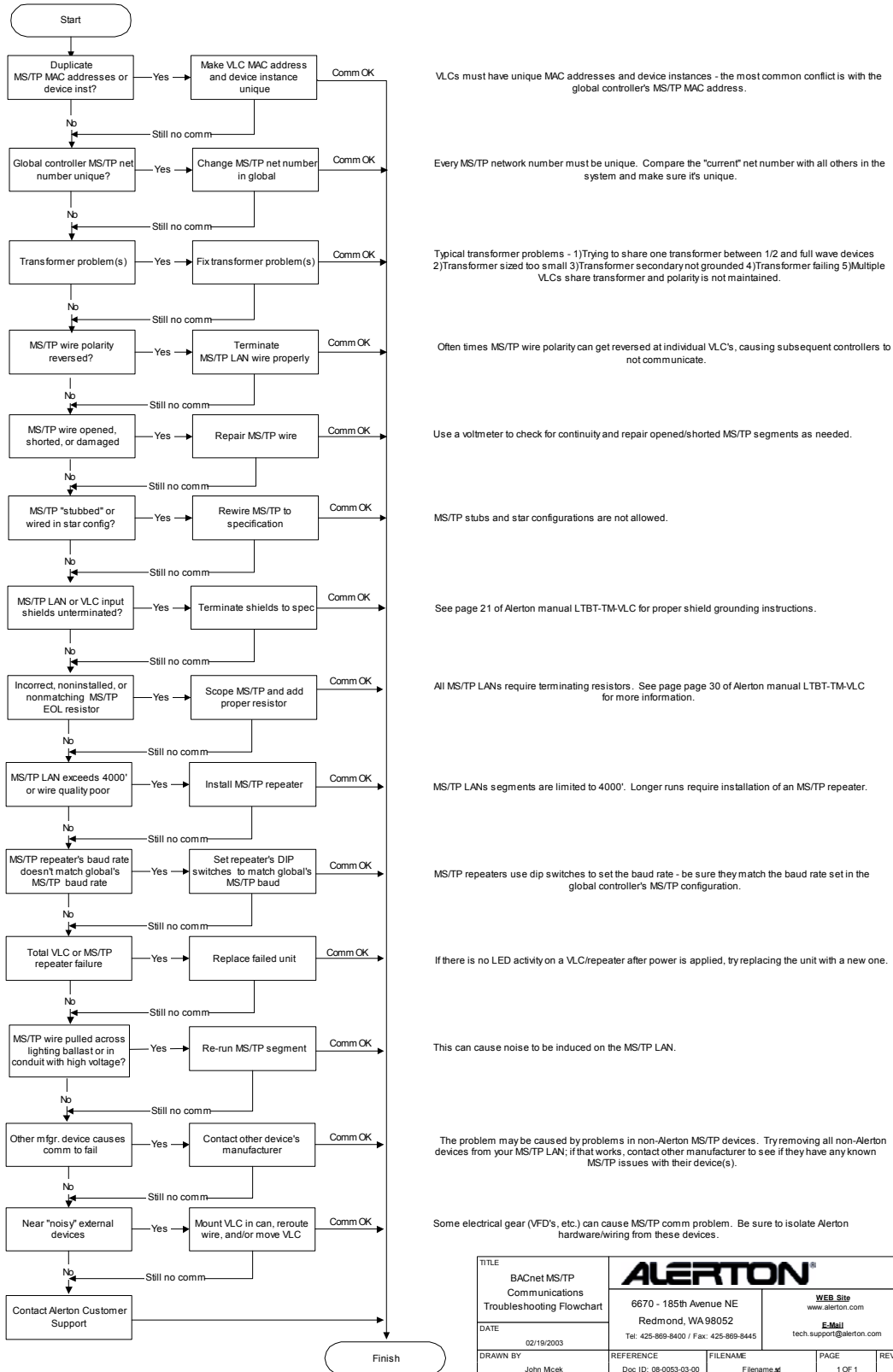


Alerton Communications Troubleshooting Flowchart

Use this flowchart to help you determine the source of your system's communication issues. Have this flowchart available when contacting Alerton Technical Support.



VLCs must have unique MAC addresses and device instances - the most common conflict is with the global controller's MS/TP MAC address.

Every MS/TP network number must be unique. Compare the "current" net number with all others in the system and make sure it's unique.

Typical transformer problems - 1) Trying to share one transformer between 1/2 and full wave devices 2) Transformer sized too small 3) Transformer secondary not grounded 4) Transformer failing 5) Multiple VLCs share transformer and polarity is not maintained.

Often times MS/TP wire polarity can get reversed at individual VLC's, causing subsequent controllers to not communicate.

Use a voltmeter to check for continuity and repair opened/shorted MS/TP segments as needed.

MS/TP stubs and star configurations are not allowed.

See page 21 of Alerton manual LTBT-TM-VLC for proper shield grounding instructions.

All MS/TP LANs require terminating resistors. See page 30 of Alerton manual LTBT-TM-VLC for more information.

MS/TP LANs segments are limited to 4000'. Longer runs require installation of an MS/TP repeater.

MS/TP repeaters use dip switches to set the baud rate - be sure they match the baud rate set in the global controller's MS/TP configuration.

If there is no LED activity on a VLC/repeater after power is applied, try replacing the unit with a new one.

This can cause noise to be induced on the MS/TP LAN.

The problem may be caused by problems in non-Alerton MS/TP devices. Try removing all non-Alerton devices from your MS/TP LAN; if that works, contact other manufacturer to see if they have any known MS/TP issues with their device(s).

Some electrical gear (VFD's, etc.) can cause MS/TP comm problem. Be sure to isolate Alerton hardware/wiring from these devices.

TITLE BACnet MS/TP Communications Troubleshooting Flowchart		ALERTON [®]	
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		PAGE 1 OF 1	REV