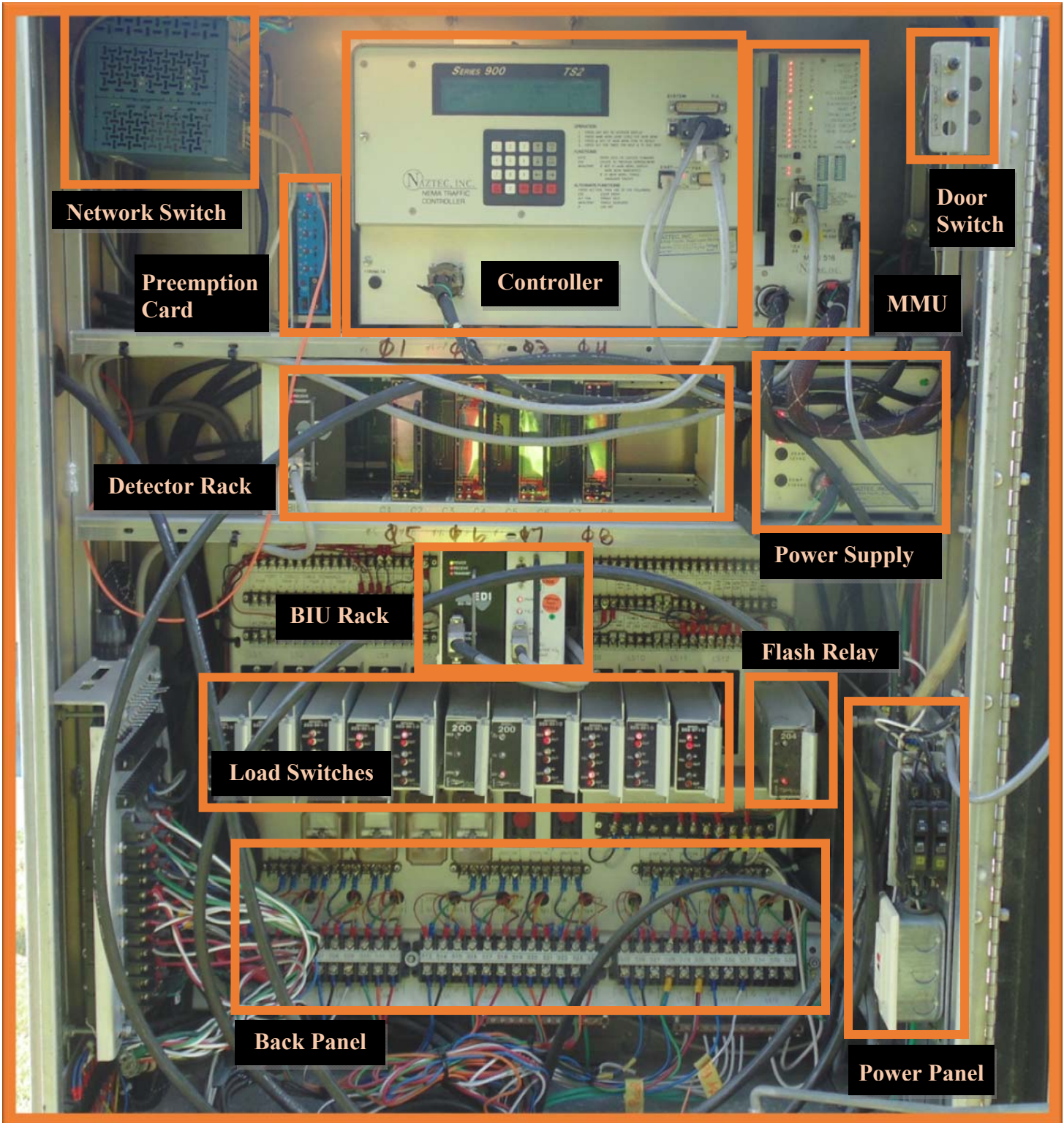


Components of a Typical TS2 Traffic Cabinet



Running Hill Road at Cummings Road, South Portland Maine

C.Thompson

Component Functions

Network Switch:	Enables Ethernet based communication within the cabinet. The switch also typically handles exterior communications, such as connections to Fiber Optic, Wireless Radio, Copper Wire, or other communication mediums.
Preemption Card:	Monitors the Preemption inputs on the Back Panel and sends a signal to the controller if a preemption call is received.
Controller:	Is responsible for the logic that controls the intersection and all the operational functionality at the intersection. The controller is capable of processing and responding to inputs from many different devices. The signal head outputs are passed from the controller to a BIU.
MMU:	Malfunction Monitoring Unit. The MMU is responsible for ensuring the safe operation of the traffic signal. It monitors the voltage to each signal head and has the ability to determine when a conflict in signal indications has occurred. When a conflict is detected the MMU has the ability to put the intersection in Flashing Operation.
Door Switch:	Sends a signal to the controller when the cabinet door is open.
Detector Rack:	The Detector Rack is responsible for monitoring the detection devices and then sending a signal to the controller when the detection has been activated.
Power Supply:	The power supply converts the input voltage of 120 Volts AC to 12 Volts DC to be used by the various shelf mounted devices in the cabinet.
BIU Rack:	The Bus Interface Unit Rack is responsible for passing the digital inputs from the controller to the analog load switches.
Load Switches:	The Load Switches are triggered by the signal from the BIU and allow the 120V input from the power panel to pass to the signal indications. Typically each load switch is responsible for a single signal phase, which could consist of multiple signal heads.
Flash Relay:	The Flash Relay is responsible for controlling the Load Switches when a flash input has been placed. The Flash Relay oscillates between on and off creating the flash pattern in the signal indications.
Back Panel:	The back panel is responsible for handling the input and outputs for devices exterior to the cabinet such as the signal heads, detectors, and pedestrian activation buttons.
Power Panel:	The Power Panel is the power input into the traffic signal cabinet and is similar to a breaker box in a typical home.

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