```
/**
 * @file mainLine ctc.js
 * @author Joey Damico
* @date September 25, 2019
 * @summary CTC Controller that uses all the other CTC classes and
controlls basically the entire game
 */
// Import my custom clock class
import Clock from '../Trains/clock.js';
// Import the block class, that is a piece of track
import CTC_Block from '../CTC/ctc_block.js';
// Southern Tier Interlockings
import CTC_Sparrow from '../Interlockings/Southern_Tier/
ctc sparrow.is';
import CTC_PA from '../Interlockings/Southern_Tier/ctc_pa.js';
import CTC_Port from '../Interlockings/Southern_Tier/ctc_port.js';
import CTC BC from '../Interlockings/Southern Tier/ctc bc.js';
import CTC_OV from '../Interlockings/Southern_Tier/ctc_ov.js';
import CTC_Howells from '../Interlockings/Southern_Tier/
ctc howells.is';
import CTC_Hall from '../Interlockings/Southern_Tier/ctc_hall.is';
import CTC_Hudson from '../Interlockings/Southern_Tier/ctc_hudson.js';
import CTC_Valley from '../Interlockings/Southern_Tier/ctc_valley.js';
import CTC Harriman from '../Interlockings/Southern Tier/
ctc_harriman.js';
import CTC_Sterling from '../Interlockings/Southern_Tier/
ctc sterling.js';
// Main Line Interlockings
import CTC Hilburn from '../Interlockings/Main Line/ctc hilburn.js';
import CTC SF from '../Interlockings/Main Line/ctc sf.js';
import CTC_WC from '../Interlockings/Main_Line/ctc_wc';
import CTC Ridgewood from '../Interlockings/Main Line/
ctc ridgewood.js';
import CTC_Suscon from '../Interlockings/Main_Line/ctc_suscon.js';
import CTC Mill from '../Interlockings/Main Line/ctc mill.js';
import CTC WestSecaucus from '../Interlockings/Main Line/
ctc westSecaucus.js';
import CTC Laurel from '../Interlockings/Main Line/ctc laurel.js';
// Bergen County Interlockings
import CTC_BT from '../Interlockings/Bergen_Line/ctc_bt.js';
import CTC_Pascack from '../Interlockings/Bergen_Line/ctc_pascack.js';
import CTC_HX from '.../Interlockings/Bergen_Line/ctc_hx.js';
```

```
* Class that runs the entire railroad, and the routes and train
movements. Controlls updating all the blocks and trains, and routes.
* It really is the engine behind everything in the simulation.
 * @member game clock -> Clock class to keep track of time in the
simulation
 * @member train list -> An array that holds all the trains that are
on the railroad
 * @member interlocking sparrow -> The CTC class for CP Sparrow
 * @member interlocking_pa -> The CTC class for CP PA
 * @member interlocking_port -> The CTC class for CP Port
 * @member interlocking_bc -> The CTC class for CP BC
 * @member interlocking ov -> The CTC class for CP OV
 * @member interlocking_howells -> The CTC class for CP Howells
 * @member interlocking hall -> The CTC class for CP Hall
 * @member interlocking_hudson -> The CTC class for CP Hudson Junction
 * @member interlocking_valley -> The CTC class for CP Central Valley
 * @member interlocking_harriman -> The CTC class for CP Harriman
 * @member interlocking_sterling -> The CTC class for CP Sterling
* @member interlocking hilburn -> The CTC class for the Hilburn
Interlocking
 * @member interlocking_sf -> The CTC class for the SF Interlocking
 * @member interlocking_wc -> The CTC class for the WC Interlocking
 * @member interlocking_ridgewood -> The CTC class for the Ridgewood
Junction Interlocking
 * @member interlocking_suscon -> The CTC class for the Suscon
Interlocking
 * @member interlocking mill -> The CTC class for the Mill
Interlocking
 * @member interlocking westSecacus -> The CTC class for the West
Secacus Interlocking
 * @member interlocking_bt -> The CTC class for the BT Interlocking
 * @member interlocking pascack -> THE CTC class for Pascack Junction
Interlocking
 * @member interlocking hx -> The CTC class for HX Interlocking
 * @member blocks_mainLine -> An object that holds all the Block
classes for the railroad
 */
class MainLine CTC {
    /**
     * constructor()
     * @summary The constructor for the Clock class
     * @details This will initialize all the member variables when the
program is started
```

```
*/
    constructor() {
        this.game_clock = new Clock();
        this.game clock.startClock();
        this.train_list = [];
        this.interlocking_sparrow = new CTC_Sparrow();
        this.interlocking_pa = new CTC_PA();
        this.interlocking port = new CTC Port();
        this.interlocking_bc = new CTC_BC();
        this.interlocking_ov = new CTC_OV();
        this.interlocking_howells = new CTC_Howells();
        this.interlocking_hall = new CTC_Hall();
        this.interlocking_hudson = new CTC_Hudson();
        this.interlocking_valley = new CTC_Valley();
        this.interlocking harriman = new CTC Harriman();
        this.interlocking_sterling = new CTC_Sterling();
        this.interlocking_hilburn = new CTC_Hilburn();
        this.interlocking_sf = new CTC_SF();
        this.interlocking_wc = new CTC_WC();
        this.interlocking_ridgewood = new CTC_Ridgewood();
        this.interlocking_suscon = new CTC_Suscon();
        this.interlocking_mill = new CTC_Mill();
        this.interlocking_westSecaucus = new CTC_WestSecaucus();
        this.interlocking laurel = new CTC Laurel();
        this.interlocking_bt = new CTC_BT();
        this.interlocking pascack = new CTC Pascack();
        this.interlocking_hx = new CTC_HX();
        this.blocks mainLine = {
            // Southern Tier Blocks
            block_harriman_sterling_1: new
CTC Block("1 harriman sterling", 105),
            block_valley_harriman_1: new
CTC_Block("1_valley_harriman", 28),
            block valley harriman 2: new
CTC_Block("2_valley_harriman", 28),
            block harriman industrial: new
CTC_Block("1_harriman_industrial", 8),
            block_hudson_valley_1: new CTC_Block("1_hudson_valley",
156),
            block_hudson_nysw: new CTC_Block("2_hudson_nysw", 8),
            block hall hudson 1: new CTC Block("1 hall hudson", 13),
            block_hall_hudson_2: new CTC_Block("2_hall_hudson", 13),
```

```
block hall yard: new CTC Block("2 hall yard", 8),
            block_howells_hall_1: new CTC_Block("1_howells_hall",
132),
            block ov howells 1: new CTC Block("1 ov howells", 59),
            block ov howells 2: new CTC Block("2 ov howells", 59),
            block_bc_ov_1: new CTC_Block("1_bc_ov", 117),
            block_port_bc_1: new CTC_Block("1_port_bc", 8),
            block_pa_port_1: new CTC_Block("1_pa_port", 8),
            block_pa_bc_2: new CTC_Block("2_pa_bc", 16),
            block_port_yard_west: new CTC_Block("3_port_yard_west",
8),
            block_port_yard_east: new CTC_Block("3_port_yard_east",
8),
            block_buckleys_west: new CTC_Block("4_buckleys_west", 12),
            block_buckleys_east: new CTC_Block("4_buckleys_east", 12),
            block_sparrow_pa_1: new CTC_Block("1_sparrow_pa", 16),
            block_sparrow_pa_2: new CTC_Block("2_sparrow_pa", 16),
            block_sparrow_cripple: new CTC_Block("3_sparrow_cripple",
8),
            block_bingo_sparrow: new CTC_Block("1_bingo_sparrow", 25),
            // Main Line Blocks
            block westEnd laurel 1: new CTC Block("1 westEnd laurel",
8),
            block_westEnd_laurel_2: new CTC_Block("2_westEnd_laurel",
8),
            block westEnd laurel 3: new CTC Block("3 westEnd laurel",
8),
            block_westEnd_laurel_4: new CTC_Block("4_westEnd_laurel",
8),
            block westSecaucus laurel 1: new
CTC_Block("1_laurel_westSecaucus", 8),
            block_westSecaucus_laurel_2: new
CTC Block("2 laurel westSecaucus", 8),
            block_mill_westSecaucus_1: new
CTC_Block("1_mill_westSecaucus", 61),
            block_mill_westSecaucus_2: new
CTC_Block("2_mill_westSecaucus", 61),
            block_suscon_mill_1: new CTC_Block("1_suscon_mill", 64),
            block_suscon_mill_2: new CTC_Block("2_suscon_mill", 64),
```

```
block ridgewood suscon 1: new
CTC_Block("1_ridgewood_suscon", 28),
            block_ridgewood_suscon_2: new
CTC Block("2 ridgewood suscon", 28),
            block_wc_ridgewood_3: new CTC_Block("3_wc_ridgewood", 33),
            block wc ridgewood 1: new CTC Block("1 wc ridgewood", 33),
            block_wc_ridgewood_2: new CTC_Block("2_wc_ridgewood", 33),
            block_sf_wc_1: new CTC_Block("1_sf_wc", 69),
            block_sf_wc_2: new CTC_Block("2_sf_wc", 69),
            block_hilburn_sf: new CTC_Block("2_hilburn_sf", 20),
            block_sterling_sf: new CTC_Block("1_sterling_sf", 40),
            block sterling hilburn: new
CTC_Block("2_sterling_hilburn", 20),
            block_hilburn_yard_west: new
CTC_Block("1_hilburn_yard_west", 8),
            block_hilburn_yard_east: new
CTC_Block("1_hilburn_yard_east", 8),
            block_wc_yard: new CTC_Block("1_wc_yard", 8),
            // Bergen County Blocks
            block_hx_laurel_1: new CTC_Block("1_hx_laurel", 11),
            block_hx_laurel_2: new CTC_Block("2_hx_laurel", 11),
            block_pascack_hx_1: new CTC_Block("1_pascack_hx", 22),
            block_pascack_hx_2: new CTC_Block("2_pascack_hx", 22),
            block_bt_pascack_1: new CTC_Block("1_bt_pascack", 66),
            block bt pascack 2: new CTC Block("2 bt pascack", 66),
            block ridgewood bt 1: new CTC Block("1 ridgewood bt", 61),
            block_ridgewood_bt_2: new CTC_Block("2_ridgewood_bt", 61),
            block bt nysw: new CTC Block("3 bt nysw", 8),
            block hx croxton 1: new CTC Block("1 hx croxton", 8),
            block_hx_croxton_2: new CTC_Block("2_hx_croxton", 8)
        };
    // ---- END constructor() ----
    /**
     * update_route_blocks()
     * @summary Gets all the routes from each interlocking and sets
the accoriding blocks
     */
```

```
update route blocks() {
        // Reset All The Blocks
        this.reset_route_mainLine_blocks();
        let routes = []:
        // Add Main Line Routes
        routes = routes.concat(this.interlocking laurel.get routes());
        routes =
routes.concat(this.interlocking_westSecaucus.get_routes());
        routes = routes.concat(this.interlocking_mill.get_routes());
        routes = routes.concat(this.interlocking_suscon.get_routes());
        routes =
routes.concat(this.interlocking_ridgewood.get_routes());
        routes = routes.concat(this.interlocking_wc.get_routes());
        routes = routes.concat(this.interlocking_sf.get_routes());
        routes =
routes.concat(this.interlocking_hilburn.get_routes());
        // Add Bergen County Routes
        routes = routes.concat(this.interlocking_hx.get_routes());
        routes =
routes.concat(this.interlocking_pascack.get_routes());
        routes = routes.concat(this.interlocking_bt.get_routes());
        // Add Southern Tier Routes
        routes =
routes.concat(this.interlocking_sterling.get_routes());
        routes =
routes.concat(this.interlocking harriman.get routes());
        routes = routes.concat(this.interlocking valley.get routes());
        routes = routes.concat(this.interlocking_hudson.get_routes());
        routes = routes.concat(this.interlocking hall.get routes());
routes.concat(this.interlocking_howells.get_routes());
        routes = routes.concat(this.interlocking ov.get routes());
        routes = routes.concat(this.interlocking_bc.get_routes());
        routes = routes.concat(this.interlocking_port.get_routes());
        routes = routes.concat(this.interlocking pa.get routes());
        routes =
routes.concat(this.interlocking_sparrow.get_routes());
        // Update all the blocks that have routes
        for (var i = 0; i < routes.length; i++) {
            if (routes[i] === null) {
                // Do Nothing
            }
            else {
                let name = routes[i].substr(routes[i].index0f("|") +
3, routes[i].size);
```

```
this.get block by name(name).set block status("Route");
        }
    }
    // ---- END update route blocks() ----
    /**
     * updates_trains()
     * @summary Goes through all the trains in the list and updates
their location if they're capable of doing so
     */
    update_trains() {
        // Loop through all the trains
        for (let i = 0; i < this.train_list.length; i++) {</pre>
            if (this.train_list[i].can_update_location()) {
                let new route =
this.get_interlocking_route(this.train_list[i].get_location(),
this.train_list[i].get_direction());
                if (new_route === null) {
                    // Do Nothing
                    // Train Cannot Move
                else if (new_route === undefined) {
                    // Clear Previous Block
this.get_block_by_name(this.train_list[i].get_location()).set_symbol('
');
this.get block by name(this.train list[i].get location()).set block st
atus("Empty");
                    this.train list.splice(i, 1);
                    break;
                }
                else {
                    // Clear Previous Block
this.get block by name(this.train list[i].get location()).set symbol('
');
this.get block by name(this.train list[i].get location()).set block st
atus("Empty");
                    // Get the last location
                    let location = this.train_list[i].get_location();
                    // Occupy the Interlockings
                    if (this.train list[i].get direction() === "WEST")
{
```

```
let cp trk = location.substr(0,
location.indexOf("_"));
                        let cp = this.train_list[i].get_location();
                        cp = cp.substr(cp.index0f("") + 1,
cp.lastIndexOf(" ") - 2);
                        //console.log(cp_trk, cp);
                        this.set occupy interlocking(cp trk, cp);
                        // Occupy the Next Block
                        let block = new_route.substr(10,
new route.size);
this.train_list[i].set_block_size(this.get_block_by_name(block).get_si
ze());
                        //this.train_list[i].set_block_size(8);
                        this.train_list[i].update_location(block);
                    }
                    else {
                        let cp_trk = location.substr(0,
location.indexOf(" "));
                        let cp = this.train_list[i].get_location();
                        cp = cp.substr(cp.lastIndex0f("_") + 1,
cp.size);
                        console.log(cp_trk, cp);
                        this.set_occupy_interlocking(cp_trk, cp);
                        // Occupy the Next Block
                        let block = new_route.substr(10,
new_route.size);
this.train_list[i].set_block_size(this.get_block_by_name(block).get_si
ze()):
                        //this.train list[i].set block size(8);
                        this.train list[i].update location(block);
                    }
                }
            }
        }
    // ---- END update trains() ----
    /**
     * update interlockings()
     * @summary Goes through to see if each interlocking can have a
train clear if it's occupied
    update_interlockings() {
        // Bergen County Line
        this.interlocking hx.can clear();
        this.interlocking_pascack.can_clear();
```

```
this.interlocking bt.can clear();
    // Main Line
    this.interlocking laurel.can clear();
    this.interlocking westSecaucus.can clear();
    this.interlocking_mill.can_clear();
    this.interlocking suscon.can clear();
    this.interlocking_ridgewood.can_clear();
    this.interlocking_wc.can_clear();
    this.interlocking_sf.can_clear();
    this.interlocking hilburn.can clear();
    // Southern Tier Line
    this.interlocking_sterling.can_clear();
    this.interlocking_harriman.can_clear();
    this.interlocking_valley.can_clear();
    this.interlocking_hudson.can_clear();
    this.interlocking_hall.can_clear();
    this.interlocking_howells.can_clear();
    this.interlocking_ov.can_clear();
    this.interlocking_bc.can_clear();
    this.interlocking_port.can_clear();
    this.interlocking_pa.can_clear();
    this.interlocking_sparrow.can_clear();
// ---- END update_interlockings() ----
 * get_sparrow()
* @summary Gets reference to the CP Sparrow Interlocking
 * @returns Reference to the CP Sparrow Interlocking
get sparrow() {
    return this.interlocking_sparrow;
// ---- END get sparrow() ----
/**
 * get pa()
* @summary Gets reference to the CP PA Interlocking
* @returns Reference to the CP PA Interlocking
*/
get_pa() {
    return this interlocking pa;
// ---- END get_pa() ----
/**
```

```
* get port()
* @summary Gets reference to the CP Port Interlocking
* @returns Reference to the CP Port Interlocking
*/
get_port() {
    return this.interlocking_port;
// ---- END get_port() ----
* get_bc()
* @summary Gets reference to the CP BC Interlocking
* @returns Reference to the CP BC Interlocking
*/
get_bc() {
    return this.interlocking_bc;
// ---- END get_bc() ----
/**
* get_ov()
* @summary Gets reference to the CP OV Interlocking
* @returns Reference to the CP OV Interlocking
*/
get_ov() {
   return this interlocking ov;
// ---- END get_ov() ----
/**
* get howells()
* @summary Gets reference to the CP Howells Interlocking
* @returns Reference to the CP Howells Interlocking
*/
get howells() {
    return this interlocking howells;
// ---- END get howells() ----
* get_hall()
* @summary Gets reference to the CP Hall Interlocking
* @returns Reference to the CP Hall Interlocking
*/
get_hall() {
```

```
return this interlocking hall;
// ---- END get_hall() ----
/**
* get hudson()
* @summary Gets reference to the CP Hudson Junction Interlocking
* @returns Reference to the CP Hudson Junction Interlocking
*/
get hudson() {
    return this.interlocking_hudson;
// ---- END get_hudson() ----
* get vallev()
* @summary Gets reference to the CP Central Valley Interlocking
* @returns Reference to the CP Central Valley Interlocking
*/
get_valley() {
    return this.interlocking_valley;
// ---- END get_valley() ----
/**
* get_harriman()
* @summary Gets reference to the CP Harriman Interlocking
* @returns Reference to the CP Harriman Interlocking
*/
get harriman() {
    return this.interlocking_harriman;
// ---- END get harriman() ----
/**
* get sterling()
* @summary Gets reference to the CP Sterling Interlocking
* @returns Reference to the CP Sterling Interlocking
*/
get_sterling() {
    return this.interlocking_sterling;
// ---- END get_sterling() ----
* get_hilburn()
```

```
* @summary Gets reference to the Hilburn Interlocking
* @returns Reference to the Hilburn Interlocking
get_hilburn() {
    return this interlocking hilburn;
// ---- END get hilburn() ----
/**
* qet sf()
* @summary Gets reference to the SF Interlocking
* @returns Reference to the SF Interlocking
*/
get_sf() {
    return this interlocking sf;
// ---- END get_sf() ----
/**
* get_wc()
* @summary Gets reference to the WC Interlocking
* @returns Reference to the WC Interlocking
*/
get_wc() {
    return this.interlocking_wc;
// ---- END get wc() ----
/**
* get ridgewood()
* @summary Gets reference to the Ridgewood Junction Interlocking
* @returns Reference to the Ridgewood Junction Interlocking
*/
get_ridgewood() {
    return this interlocking ridgewood;
// ---- END get_ridgewood() ----
/**
* get_suscon()
* @summary Gets reference to the Suscon Interlocking
* @returns Reference to the Suscon Interlocking
*/
get_suscon() {
    return this.interlocking_suscon;
```

```
// ---- END get_suscon() ----
/**
* get mill()
* @summary Gets reference to the Mill Interlocking
* @returns Reference to the Mill Interlocking
get_mill() {
    return this.interlocking_mill;
// ---- END get_mill() ----
/**
* get_westSecaucus()
* @summary Gets reference to the West Secaucus Interlocking
* @returns Reference to the West Secaucus Interlocking
*/
get_westSecaucus() {
    return this.interlocking_westSecaucus;
// ---- END get_westSecaucus() ----
/**
* get_laurel()
* @summary Gets reference to the Laurel Interlocking
* @returns Reference to the Laurel Interlocking
*/
get_laurel() {
    return this.interlocking_laurel;
// ---- END get_laurel() ----
/**
* get_bt()
* @summary Gets reference to the BT Interlocking
* @returns Reference to the BT Interlocking
*/
get_bt() {
    return this interlocking_bt;
// ---- END get_bt() ----
/**
* get_pascack()
* @summary Gets reference to the Pascack Interlocking
```

```
* @returns Reference to the Pascack Interlocking
     */
    get_pascack() {
        return this.interlocking_pascack;
    // ---- END get pascack() ----
    /**
     * get_hx()
     * @summary Gets reference to the HX Interlocking
     * @returns Reference to the HX Interlocking
    get_hx() {
        return this.interlocking_hx;
    // ---- END get_hx() ----
    /**
     * add_train()
     * @summary Takes in a new train and adds it to the train_list
array
     */
    add_train(new_train) {
        this.train_list.push(new_train);
    // ---- END add_train() ----
    /**
     * occupy_blocks()
     * @summary goes through all the trains and finds their current
location and occupys the correct block
     */
    occupy blocks() {
        for (let i = 0; i < this.train_list.length; i++) {</pre>
            let block =
this.get block by name(this.train list[i].get location());
            if (block === false) {
            }
            else {
                block.set_block_status("Occupied");
                block.set_symbol(this.train_list[i].get_symbol());
            }
        }
    // ---- END occupy_blocks() ----
```

```
/**
     * reset_route_mainLine_blocks()
     * @summary Resets all the blocks that are routed
    reset route mainLine blocks() {
        this.blocks mainLine.block westEnd laurel 1.reset block();
        this.blocks mainLine.block westEnd laurel 2.reset block();
        this.blocks_mainLine.block_westEnd_laurel_3.reset_block();
        this.blocks_mainLine.block_westEnd_laurel_4.reset_block();
this.blocks_mainLine.block_westSecaucus_laurel_1.reset_block();
this.blocks_mainLine.block_westSecaucus_laurel_2.reset_block();
        this.blocks mainLine.block mill westSecaucus 1.reset block();
        this.blocks_mainLine.block_mill_westSecaucus_2.reset_block();
        this.blocks mainLine.block suscon mill 1.reset block();
        this.blocks_mainLine.block_suscon_mill_2.reset_block();
        this.blocks mainLine.block ridgewood suscon 1.reset block();
        this.blocks_mainLine.block_ridgewood_suscon_2.reset_block();
        this.blocks_mainLine.block_wc_ridgewood_3.reset_block();
        this.blocks mainLine.block wc ridgewood 1.reset block();
        this.blocks_mainLine.block_wc_ridgewood_2.reset_block();
        this.blocks mainLine.block sf wc 1.reset block();
        this.blocks_mainLine.block_sf_wc_2.reset_block();
        this.blocks mainLine.block hilburn sf.reset block();
        this.blocks_mainLine.block_sterling_sf.reset_block();
        this.blocks mainLine.block sterling hilburn.reset block();
        this.blocks_mainLine.block_hilburn_yard_west.reset_block();
        this.blocks mainLine.block hilburn yard east.reset block();
        this.blocks_mainLine.block_wc_yard.reset_block();
        // Bergen County Line
        this.blocks mainLine.block_hx_laurel_1.reset_block();
        this.blocks_mainLine.block_hx_laurel_2.reset_block();
        this.blocks_mainLine.block_pascack_hx_1.reset_block();
        this.blocks_mainLine.block_pascack_hx_2.reset_block();
        this.blocks_mainLine.block_bt_pascack_1.reset_block();
```

```
this.blocks mainLine.block bt pascack 2.reset block();
   this.blocks_mainLine.block_ridgewood_bt_1.reset_block();
   this.blocks mainLine.block ridgewood bt 2.reset block();
   this.blocks mainLine.block bt nysw.reset block();
   this.blocks mainLine.block hx croxton 1.reset block();
   this.blocks mainLine.block hx croxton 2.reset block();
   // Southern Tier Line
   this.blocks mainLine.block harriman sterling 1.reset block();
   this.blocks_mainLine.block_valley_harriman_1.reset_block();
   this.blocks_mainLine.block_valley_harriman_2.reset_block();
   this.blocks_mainLine.block_harriman_industrial.reset_block();
   this.blocks mainLine.block hudson valley 1.reset block();
   this.blocks_mainLine.block_hudson_nysw.reset_block();
   this.blocks mainLine.block hall hudson 1.reset block();
   this.blocks_mainLine.block_hall_hudson_2.reset_block();
   this.blocks_mainLine.block_hall_yard.reset_block();
   this.blocks_mainLine.block_howells_hall_1.reset_block();
   this.blocks_mainLine.block_ov_howells_1.reset_block();
   this.blocks mainLine.block ov howells 2.reset block();
   this.blocks_mainLine.block_bc_ov_1.reset_block();
   this.blocks_mainLine.block_port_bc_1.reset_block();
   this.blocks_mainLine.block_pa_port_1.reset_block();
   this.blocks mainLine.block pa bc 2.reset block();
   this.blocks_mainLine.block_port_yard_west.reset_block();
   this.blocks_mainLine.block_port_yard_east.reset_block();
   this.blocks_mainLine.block_buckleys_west.reset_block();
   this.blocks_mainLine.block_buckleys_east.reset_block();
   this.blocks mainLine.block sparrow pa 1.reset block();
   this.blocks_mainLine.block_sparrow_pa_2.reset_block();
   this.blocks mainLine.block sparrow cripple.reset block();
   this.blocks mainLine.block bingo sparrow.reset block();
// ---- END reset route mainLine blocks() ----
/**
* get mainLine blocks status()
* @summary Gets the status of all the bloccks on the Southern
```

```
Tier Section
     * @returns An object with the status of each block
    get mainLine blocks status() {
        var status = {
            block westEnd laurel 1:
this.blocks mainLine.block westEnd laurel 1.get block status(),
            block_westEnd_laurel_2:
this.blocks mainLine.block_westEnd_laurel_2.get_block_status(),
            block westEnd laurel 3:
this.blocks_mainLine.block_westEnd_laurel_3.get_block_status(),
            block_westEnd_laurel_4:
this.blocks_mainLine.block_westEnd_laurel_4.get_block_status(),
            block_laurel_westSecaucus_1:
this.blocks_mainLine.block_westSecaucus_laurel_1.get_block_status(),
            block laurel westSecaucus 2:
this.blocks_mainLine.block_westSecaucus_laurel_2.get_block_status(),
            block_mill_westSecaucus_1:
this.blocks_mainLine.block_mill_westSecaucus_1.get_block_status(),
            block_mill_westSecaucus_2:
this.blocks_mainLine.block_mill_westSecaucus_2.get_block_status(),
            block_suscon_mill_1:
this.blocks_mainLine.block_suscon_mill_1.get_block_status(),
            block suscon mill 2:
this.blocks_mainLine.block_suscon_mill_2.get_block_status(),
            block ridgewood suscon 1:
this.blocks_mainLine.block_ridgewood_suscon_1.get_block_status(),
            block ridgewood suscon 2:
this.blocks mainLine.block ridgewood suscon 2.get block status(),
            block wc ridgewood 3:
this.blocks mainLine.block wc ridgewood 3.get block status(),
            block wc ridgewood 1:
this.blocks mainLine.block wc ridgewood 1.get block status(),
            block wc ridgewood 2:
this.blocks_mainLine.block_wc_ridgewood_2.get_block_status(),
            block sf wc 1:
this.blocks_mainLine.block_sf_wc_1.get_block_status(),
            block_sf_wc_2:
this.blocks_mainLine.block_sf_wc_2.get_block_status(),
            block_hilburn_sf:
this.blocks mainLine.block hilburn sf.get block status(),
```

```
block sterling sf:
this.blocks_mainLine.block_sterling_sf.get_block_status(),
            block_sterling_hilburn:
this.blocks mainLine.block sterling hilburn.get block status(),
            block_hilburn_yard_west:
this.blocks mainLine.block hilburn yard west.get block status(),
            block hilburn yard east:
this.blocks_mainLine.block_hilburn_yard_east.get_block_status(),
            block wc yard:
this.blocks_mainLine.block_wc_yard.get_block_status()
        };
        return status;
    // ---- END get mainLine blocks status() ----
    /**
     * get_bergen_blocks_status()
     * @summary Gets the status of all the blocks on the Southern Tier
Section
     * @returns An object with the status of each block
     */
    get_bergen_blocks_status() {
        let status = {
            block_hx_laurel_1:
this.blocks_mainLine.block_hx_laurel_1.get_block_status(),
            block hx laurel 2:
this.blocks_mainLine.block_hx_laurel_2.get_block_status(),
            block pascack hx 1:
this.blocks mainLine.block pascack hx 1.get block status(),
            block_pascack_hx_2:
this.blocks_mainLine.block_pascack_hx_2.get_block_status(),
            block_bt_pascack_1:
this.blocks mainLine.block bt pascack 1.get block status(),
            block bt pascack 2:
this.blocks_mainLine.block_bt_pascack_2.get_block_status(),
            block ridgewood bt 1:
this.blocks_mainLine.block_ridgewood_bt_1.get_block_status(),
            block ridgewood bt 2:
this.blocks_mainLine.block_ridgewood_bt_2.get_block_status(),
            block_bt_nysw:
this.blocks_mainLine.block_bt_nysw.get_block_status(),
            block_hx_croxton_1:
```

```
this.blocks mainLine.block hx croxton 1.get block status(),
            block hx croxton 2:
this.blocks_mainLine.block_hx_croxton_2.get_block_status()
        return status;
    // ---- END get bergen block status() ----
    /**
     * get tier block status()
     * @breif Gets the status of all the blocks on the Southern Tier
Section
     * @returns An object with the status of each block
    get tier block status() {
        let status = {
            // Block Status
            block harriman sterling 1:
this.blocks_mainLine.block_harriman_sterling_1.get_block_status(),
            block valley harriman 1:
this.blocks_mainLine.block_valley_harriman_1.get_block_status(),
            block_valley_harriman_2:
this.blocks_mainLine.block_valley_harriman_2.get_block_status(),
            block harriman industrial:
this.blocks_mainLine.block_harriman_industrial.get_block_status(),
            block hudson valley 1:
this.blocks_mainLine.block_hudson_valley_1.get_block_status(),
            block hudson nysw:
this.blocks mainLine.block hudson nysw.get block status(),
            block_hall_hudson_1:
this.blocks mainLine.block hall hudson 1.get block status(),
            block hall hudson 2:
this.blocks_mainLine.block_hall_hudson_2.get_block_status(),
            block hall yard:
this.blocks mainLine.block hall yard.get block status(),
            block howells hall 1:
this.blocks_mainLine.block_howells_hall_1.get_block_status(),
            block ov howells 1:
this.blocks_mainLine.block_ov_howells_1.get_block_status(),
            block_ov_howells_2:
this.blocks_mainLine.block_ov_howells_2.get_block_status(),
            block_bc_ov_1:
```

```
this.blocks mainLine.block bc ov 1.get block status(),
            block port bc 1:
this.blocks_mainLine.block_port_bc_1.get_block_status(),
            block pa port 1:
this.blocks_mainLine.block_pa_port_1.get_block_status(),
            block pa bc 2:
this.blocks_mainLine.block_pa_bc_2.get_block_status(),
            block_port_yard_west:
this.blocks mainLine.block port yard west.get block status(),
            block port yard east:
this.blocks_mainLine.block_port_yard_east.get_block_status(),
            block_buckleys_west:
this.blocks_mainLine.block_buckleys_west.get_block_status(),
            block_buckleys_east:
this.blocks_mainLine.block_buckleys_east.get_block_status(),
            block_sparrow_pa_1:
this.blocks_mainLine.block_sparrow_pa_1.get_block_status(),
            block_sparrow_pa_2:
this.blocks_mainLine.block_sparrow_pa_2.get_block_status(),
            block_sparrow_cripple:
this.blocks_mainLine.block_sparrow_cripple.get_block_status(),
            block_bingo_sparrow:
this.blocks_mainLine.block_bingo_sparrow.get_block_status()
        };
        return status;
    // ---- END get tier block status() ----
    /**
     * get bergen symbols()
     * @summary Gets all the symbols for the blocks on the Bergen
County Line Section
     * @returns An obnject with all the block symbols on the Bergen
Line
    get bergen symbols() {
        let symbols = {
            symbol ridgewood bt 1:
this.blocks_mainLine.block_ridgewood_bt_1.get_symbol(),
            symbol_ridgewood_bt_2:
this.blocks_mainLine.block_ridgewood_bt_2.get_symbol(),
            symbol_bt_pascack_1:
this.blocks_mainLine.block_bt_pascack_1.get_symbol(),
            symbol bt pascack 2:
```

```
this.blocks mainLine.block bt pascack 2.get symbol(),
            symbol bt nysw:
this.blocks_mainLine.block_bt_nysw.get_symbol(),
            symbol pascack hx 1:
this.blocks mainLine.block pascack hx 1.get symbol(),
            symbol pascack hx 2:
this.blocks mainLine.block pascack hx 2.get symbol(),
            symbol hx laurel 1:
this.blocks_mainLine.block_hx_laurel_1.get_symbol(),
            symbol hx laurel 2:
this.blocks mainLine.block hx laurel 2.get symbol(),
            symbol_hx_croxton_1:
this.blocks_mainLine.block_hx_croxton_1.get_symbol(),
            symbol_hx_croxton_2:
this.blocks_mainLine.block_hx_croxton_2.get_symbol(),
        return symbols;
    // ---- END get bergen symbols() ----
    /**
     * get_mainLine_symbol()
     * @summary Gets all the symbols for the blocks on the Main Line
Section
     * @returns An object with all the block symbols on the Main Line
Section
     */
    get mainLine symbols() {
        let symbols = {
            // First Row
            symbol sterling sf 1:
this.blocks mainLine.block sterling sf.get symbol(),
            symbol_sterling_hilburn_2:
this.blocks mainLine.block sterling hilburn.get symbol(),
            symbol hilburn sf 2:
this.blocks_mainLine.block_hilburn_sf.get_symbol(),
            symbol hilburn yardWest:
this.blocks mainLine.block hilburn yard west.get symbol(),
            symbol_hilburn_yardEast:
this.blocks mainLine.block hilburn yard east.get symbol(),
            symbol_sf_wc_1:
this.blocks_mainLine.block_sf_wc_1.get_symbol(),
            symbol sf wc 2:
this.blocks_mainLine.block_sf_wc_2.get_symbol(),
            symbol_wc_yard:
this.blocks_mainLine.block_wc_yard.get_symbol(),
            symbol wc ridgewood 1:
this.blocks_mainLine.block_wc_ridgewood_1.get_symbol(),
```

```
symbol wc ridgewood 2:
this.blocks mainLine.block wc ridgewood 2.get symbol(),
            symbol_wc_ridgewood_3:
this.blocks mainLine.block wc ridgewood 3.get symbol(),
            // Second Row
            symbol ridgewood suscon 1:
this.blocks mainLine.block ridgewood suscon 1.get symbol(),
            symbol ridgewood suscon 2:
this.blocks_mainLine.block_ridgewood_suscon_2.get_symbol(),
            symbol suscon mill 1:
this.blocks mainLine.block suscon mill 1.get symbol(),
            symbol_suscon_mill_2:
this.blocks_mainLine.block_suscon_mill_2.get_symbol(),
            symbol_mill_westSecaucus_1:
this.blocks_mainLine.block_mill_westSecaucus_1.get_symbol(),
            symbol_mill_westSecaucus_2:
this.blocks mainLine.block mill westSecaucus 2.get symbol(),
            symbol_westSecaucus_laurel_1:
this.blocks_mainLine.block_westSecaucus_laurel_1.get_symbol(),
            symbol_westSecaucus_laurel_2:
this.blocks_mainLine.block_westSecaucus_laurel_2.get_symbol(),
            symbol_laurel_westEnd_1:
this.blocks_mainLine.block_westEnd_laurel_1.get_symbol(),
            symbol_laurel_westEnd_2:
this.blocks_mainLine.block_westEnd_laurel_2.get_symbol(),
            symbol_laurel_westEnd_3:
this.blocks_mainLine.block_westEnd_laurel_3.get_symbol(),
            symbol_laurel_westEnd_4:
this.blocks_mainLine.block_westEnd_laurel_4.get_symbol(),
        };
        return symbols;
    // ---- END get mainLine symbols() ----
     * get tier symbols()
     * @summary Gets all the symbols for the blocks on the Southern
Tier Section
     * @returns An object with all the block symbols on the Southern
Tier Section
     */
    get_tier_symbols() {
        let symbols = {
            // First Row
            symbol_bingo_sparrow:
this.blocks_mainLine.block_bingo_sparrow.get_symbol(),
            symbol sparrow pa 1:
this.blocks_mainLine.block_sparrow_pa_1.get_symbol(),
```

```
symbol sparrow pa 2:
this.blocks_mainLine.block_sparrow_pa_2.get_symbol(),
            symbol pa port 1:
this.blocks mainLine.block pa port 1.get symbol(),
            symbol port bc 1:
this.blocks_mainLine.block_port_bc_1.get_symbol(),
            symbol pa bc 2:
this.blocks_mainLine.block_pa_bc_2.get_symbol(),
            symbol_port_yardEast:
this.blocks_mainLine.block_port_yard_east.get_symbol(),
            symbol bc ov:
this.blocks_mainLine.block_bc_ov_1.get_symbol(),
            symbol_ov_howells_1:
this.blocks_mainLine.block_ov_howells_1.get_symbol(),
            symbol ov howells 2:
this.blocks_mainLine.block_ov_howells_2.get_symbol(),
            // Second Row
            symbol_howells_hall:
this.blocks_mainLine.block_howells_hall_1.get_symbol(),
            symbol hall yard:
this.blocks_mainLine.block_hall_yard.get_symbol(),
            symbol_hall_hudson_1:
this.blocks_mainLine.block_hall_hudson_1.get_symbol(),
            symbol_hall_hudson_2:
this.blocks_mainLine.block_hall_hudson_2.get_symbol(),
            symbol_hudson_valley:
this.blocks mainLine.block hudson valley 1.get symbol(),
            symbol hudson nysw:
this.blocks_mainLine.block_hudson_nysw.get_symbol(),
            symbol valley harriman 1:
this.blocks_mainLine.block_valley_harriman_1.get_symbol(),
            symbol_valley_harriman_2:
this.blocks_mainLine.block_valley_harriman_2.get_symbol(),
            // Third Row
            symbol_harriman_sterling:
this.blocks mainLine.block harriman sterling 1.get symbol(),
            symbol harriman industrial:
this.blocks mainLine.block harriman industrial.get symbol(),
        };
        return symbols;
    // ---- END get_tier_symbols() ----
    /**
     * get interlocking route()
     * @summary Takes where a train currently is and gets it's next
route
     * @param key, Is ueed to find the trains curent interlocking
```

```
* @param direction, which way the train is traveling
     */
    get_interlocking_route(key, direction) {
        let first index = key.index0f(" ");
        let second index = key.lastIndexOf(" ");
        let track:
        let interlocking;
        if (direction === "WEST") {
            track = key.substr(0, first index);
            interlocking = key.substr(first index + 1, second index -
2);
        }
        else {
            track = key.substr(0, first_index);
            interlocking = key.substr(second_index + 1, key.size);
        }
        // Southern Tier Line
        if (interlocking === "sparrow") {
            return this.get_sparrow().get_train_route(direction,
track);
        if (interlocking === "pa") {
            return this.get_pa().get_train_route(direction, track);
        if (interlocking === "port") {
            return this.get_port().get_train_route(direction, track);
        }
        if (interlocking === "bc") {
            return this.get_bc().get_train_route(direction, track);
        }
        if (interlocking === "ov") {
            return this.get ov().get train route(direction, track);
        if (interlocking === "howells") {
            return this.get howells().get train route(direction,
track):
        if (interlocking === "hall") {
            return this.get_hall().get_train_route(direction, track);
        }
        if (interlocking === "hudson") {
            return this.get_hudson().get_train_route(direction,
track);
        if (interlocking === "valley") {
            return this.get_valley().get_train_route(direction,
track);
        }
```

```
if (interlocking === "harriman") {
            return this.get_harriman().get_train_route(direction,
track):
        if (interlocking === "sterling") {
            return this.get_sterling().get_train_route(direction,
track);
        }
        // Main Line
        if (interlocking === "hilburn") {
            return this.get_hilburn().get_train_route(direction,
track);
        }
        if (interlocking === "sf") {
            return this.get_sf().get_train_route(direction, track);
        }
        if (interlocking === "wc") {
            return this.get_wc().get_train_route(direction, track);
        if (interlocking === "ridgewood") {
            return this.get_ridgewood().get_train_route(direction,
track);
        if (interlocking === "suscon") {
            return this.get_suscon().get_train_route(direction,
track);
        if (interlocking === "mill") {
            return this.get mill().get train route(direction, track);
        if (interlocking === "westSecaucus") {
            return this.get westSecaucus().get train route(direction,
track);
        if (interlocking === "laurel") {
            return this.get_laurel().get_train_route(direction,
track):
        }
        // Bergen County Line
        if (interlocking === "bt") {
            return this.get_bt().get_train_route(direction, track);
        if (interlocking === "pascack") {
            return this.get_pascack().get_train_route(direction,
track);
        if (interlocking === "hx") {
            return this.get_hx().get_train_route(direction, track);
```

```
}
    // ---- END get_interlocking_route() ----
    /**
    * set_occupy_interlocking
    * @summary Takes in what interlocking and the track number, and
set that the specific interlocking is occupied on the last track
    * @param track, the track number in the interlocking to occupy,
for some interlocking with only one route doesn't need the track
    * @param name, the name of the interlocking to occupy
    set_occupy_interlocking(track, name) {
        if (name === "hx") {
            if (track === "2") {
                this.get_hx().set_trk_2_occupied(true);
            }
            else {
                this.get_hx().set_trk_1_occupied(true);
        }
        if (name === "pascack") {
            if (track === "1") {
                this.get_pascack().set_trk_1_occupied(true);
            }
            else {
                this.get_pascack().set_trk_2_occupied(true);
        }
        if (name === "bt") {
            if (track === "2") {
                this.get_bt().set_trk_2_occupied(true);
            }
            else {
                this.get_bt().set_trk_1_occupied(true);
        }
        if (name === "laurel") {
            if (track === "1") {
                this.get_laurel().set_trk_1_occupied(true);
            }
            else if (track === "2") {
                this.get_laurel().set_trk_2_occupied(true);
            else if (track === "3") {
                this.get_laurel().set_trk_3_occupied(true);
            }
            else {
                this.get_laurel().set_trk_4_occupied(true);
```

```
}
}
if (name === "westSecaucus") {
    this.get_westSecaucus().set_occupied(true);
if (name === "mill") {
    if (track === "1") {
        this.get_mill().set_trk_1_occupied(true);
    }
    else {
        this.get_mill().set_trk_2_occupied(true);
    }
}
if (name === "suscon") {
    if (track === "1") {
        this.get_suscon().set_trk_1_occupied(true);
    }
    else {
        this.get_suscon().set_trk_2_occupied(true);
    }
if (name === "ridgewood") {
    if (track === "1" || track === "4") {
        this.get_ridgewood().set_trk_1_occupied(true);
    }
    else if (track === "2") {
        this.get_ridgewood().set_trk_2_occupied(true);
    }
    else {
        this.get_ridgewood().set_trk_3_occupied(true);
}
if (name === "wc") {
    if (track === "2") {
        this.get_wc().set_trk_2_occupied(true);
    }
    else {
        this.get_wc().set_trk_1_occupied(true);
    }
if (name === "sf") {
    if (track === "1") {
        this.get_sf().set_trk_1_occupied(true);
    }
    else {
        this.get_sf().set_trk_2_occupied(true);
}
if (name === "hilburn") {
    this.get_hilburn().set_occupied(true);
```

```
}
    if (name === "sterling") {
        this.get_sterling().set_occupied(true);
    if (name === "harriman") {
        this.get harriman().set occupied(true);
    if (name === "valley") {
        this.get_valley().set_occupied(true);
    if (name === "hudson") {
        this.get_hudson().set_occupied(true);
    }
    if (name === "hall") {
        if (track === "1") {
            this.get_hall().set_trk_1_occupied(true);
        }
        else {
            this.get_hall().set_trk_2_occupied(true);
    }
    if (name === "howells") {
        this.get_howells().set_occupied(true);
    if (name === "ov") {
        this.get_ov().set_occupied(true);
    if (name === "bc") {
        this.get_bc().set_occupied(true);
    if (name === "port") {
        this.get_port().set_occupied(true);
    if (name === "pa") {
        if (track === "1") {
            this.get_pa().set_trk_1_occupied(true);
        }
        else {
            this.get_pa().set_trk_2_occupied(true);
    }
    if (name === "sparrow") {
        this.get_sparrow().set_occupied(true);
    }
// ---- END set_occupy_interlocking() ----
* get_block_by_name()
```

```
* @summary takes in the name of a block, and returns the
reference to that specific block
    * @param name, the name of the block to find
    * @return reference to the block
    */
    get_block_by_name(name) {
        var block = name.substring(2, name.size);
        var track = name.substring(0, 1);
        if (block === "harriman_sterling") {
            return this.blocks_mainLine.block_harriman_sterling_1;
        }
        else if (block === "valley_harriman") {
            if (track === "1") {
                return this.blocks_mainLine.block_valley_harriman_1;
            }
            else {
                return this.blocks_mainLine.block_valley_harriman_2;
        }
        else if (block === "industrial_harriman") {
            return this.blocks_mainLine.block_harriman_industrial;
        else if (block === "hudson_valley") {
            return this.blocks_mainLine.block_hudson_valley_1;
        else if (block === "hudson_nysw") {
            return this.blocks_mainLine.block_hudson_nysw;
        else if (block === "hall hudson"){
            if (track === "1") {
                return this.blocks_mainLine.block_hall_hudson_1;
            }
            else {
                return this.blocks_mainLine.block_hall_hudson_2;
        }
        else if (block === "yard hall") {
            return this.blocks_mainLine.block_hall_yard;
        else if (block === "howells_hall") {
            return this.blocks_mainLine.block_howells_hall_1;
        else if (block === "ov_howells") {
            if (track === "1") {
                return this.blocks_mainLine.block_ov_howells_1;
            }
            else {
```

```
return this.blocks mainLine.block ov howells 2;
    }
}
else if (block === "bc_ov") {
    return this.blocks_mainLine.block_bc_ov_1;
else if (block === "port bc") {
    return this.blocks_mainLine.block_port_bc_1;
}
else if (block === "pa_port") {
    return this.blocks_mainLine.block_pa_port_1;
else if (block === "pa_bc") {
    return this.blocks_mainLine.block_pa_bc_2;
else if (block === "port_yardWest") {
    return this.blocks_mainLine.block_port_yard_west;
else if (block === "yardEast_port") {
    return this.blocks_mainLine.block_port_yard_east;
else if (block === "sparrow_pa") {
    if (track === "1") {
        return this.blocks_mainLine.block_sparrow_pa_1;
    }
    else {
        return this.blocks_mainLine.block_sparrow_pa_2;
}
else if (block === "sparrow_cripple") {
    return this.blocks_mainLine.block_sparrow_cripple;
else if (block === "bingo_sparrow") {
    return this.blocks_mainLine.block_bingo_sparrow;
else if (block === "laurel westEnd") {
    if (track === "1") {
        return this.blocks_mainLine.block_westEnd_laurel_1;
    }
    else if (track === "2") {
        return this.blocks_mainLine.block_westEnd_laurel_2;
    }
    else if (track === "3") {
        return this.blocks_mainLine.block_westEnd_laurel_3;
    else if (track === "4") {
        return this.blocks_mainLine.block_westEnd_laurel_4;
    }
else if (block === "westSecaucus_laurel") {
```

```
if (track === "2") {
                return
this.blocks_mainLine.block_westSecaucus_laurel_1;
            else if (track === "4") {
                return
this.blocks mainLine.block westSecaucus laurel 2;
        }
        else if (block === "mill westSecaucus") {
            if (track === "1") {
                return this.blocks_mainLine.block_mill_westSecaucus_1;
            else if (track === "2") {
                return this.blocks_mainLine.block_mill_westSecaucus_2;
        }
        else if (block === "suscon_mill") {
            if (track === "1") {
                return this.blocks_mainLine.block_suscon_mill_1;
            else if (track === "2") {
                return this.blocks_mainLine.block_suscon_mill_2;
            }
        else if (block === "ridgewood_suscon") {
            if (track === "1") {
                return this.blocks_mainLine.block_ridgewood_suscon_1;
            else if (track === "2") {
                return this.blocks_mainLine.block_ridgewood_suscon_2;
            }
        else if (block === "wc ridgewood") {
            if (track === "1") {
                return this.blocks_mainLine.block_wc_ridgewood_1;
            }
            else if (track === "2") {
                return this.blocks mainLine.block wc ridgewood 2;
            else if (track === "3") {
                return this.blocks_mainLine.block_wc_ridgewood_3;
            }
        }
        else if (block === "sf_wc") {
            if (track === "1") {
                return this.blocks_mainLine.block_sf_wc_1;
            }
            else if (track === "2") {
                return this.blocks_mainLine.block_sf_wc_2;
```

```
}
}
else if (block === "sterling_sf") {
    return this.blocks_mainLine.block_sterling_sf;
else if (block === "hilburn_sf") {
    return this.blocks mainLine.block hilburn sf;
else if (block === "sterling_hilburn") {
    return this.blocks_mainLine.block_sterling_hilburn;
else if (block === "hilburn_yardWest") {
    return this.blocks_mainLine.block_hilburn_yard_west;
}
else if (block === "yardHilburn_sf") {
    return this.blocks_mainLine.block_hilburn_yard_east;
}
else if (block === "yard_wc") {
    return this.blocks_mainLine.block_wc_yard;
else if (block === "hx_laurel") {
    if (track === "3") {
        return this.blocks_mainLine.block_hx_laurel_1;
    }
    else {
        return this.blocks_mainLine.block_hx_laurel_2;
    }
else if (block === "pascack_hx") {
    if (track === "1") {
        return this.blocks_mainLine.block_pascack_hx_1;
    }
    else {
        return this.blocks_mainLine.block_pascack_hx_2;
    }
else if (block === "bt pascack") {
    if (track === "1") {
        return this.blocks_mainLine.block_bt_pascack_1;
    }
    else {
        return this.blocks_mainLine.block_bt_pascack_2;
    }
else if (block === "ridgewood_bt") {
    if (track === "1" || track === "3") {
        return this.blocks_mainLine.block_ridgewood_bt_1;
    }
    else {
        return this.blocks_mainLine.block_ridgewood_bt_2;
```

```
}
        }
        else if (block === "bt_nysw") {
            return this.blocks_mainLine.block_bt_nysw;
        else if (block === "hx_croxton") {
            if (track === "1" || track === "4") {
                return this.blocks_mainLine.block_hx_croxton_1;
            }
            else {
                return this.blocks_mainLine.block_hx_croxton_2;
        }
        else {
            return false;
    }
    // ---- END get_block_by_name() ----
}
export default MainLine_CTC;
```