

SUMMARY OF INPUTS

- Target Inputs: Ground speed, rate of climb, target angle, director train, director elevation, observed range, own ship inputs, wind inputs, rate control inputs, deck inclination, other inputs, star shell inputs.

SUMMARY OF INTERMEDIATE QUANTITIES

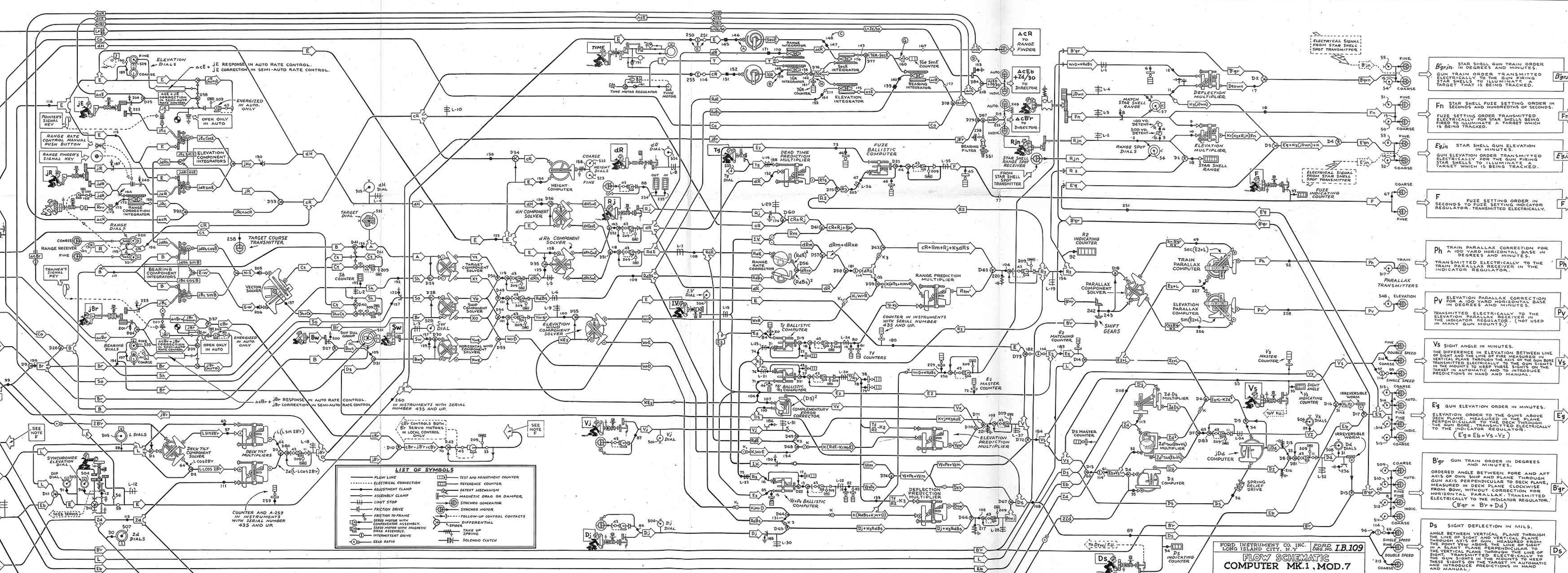
- Tracking quantities: Deck tilt correction, horizontal deflection component of own ship's speed, horizontal deflection component of target speed, total linear deflection rate, horizontal range component of own ship's speed, horizontal range component of target speed, range rate along the line of sight, target diving speed, linear elevation rate perpendicular to line of sight, increment of generated range, generated present range, elevation of line of sight above horizontal plane, increment of generated true bearing, increment of generated relative bearing, increment of generated relative bearing in deck plane, generated bearing, increment of generated elevation, generated elevation, own ship's course, initial setting of range, range correction to generated range during rate control, linear range control correction to generated range, initial setting or correction to generated bearing during rate control, linear rate control correction to deflection rate, initial setting or correction to generated elevation during rate control, linear rate control correction to horizontal range rate, rate control correction to vertical speed, east-west component of horizontal target velocity, north-south component of horizontal target velocity, time generated by regulator time motor, wind direction clockwise to line of sight, wind direction clockwise to line of fire, horizontal component of true wind across the plane of fire, horizontal component of apparent wind in plane of fire, component of apparent wind affecting deflection prediction, component of apparent wind affecting elevation prediction, component of apparent wind affecting range prediction, correction to prediction range rate for effect of deflection and elevation rates, correction to prediction range rate for change in I.V., prediction range rate, range prediction for relative movement of ship and target, range prediction to compensate for effect of apparent wind, correction to range prediction for change in I.V. from 2550 f.s., predicted range (approximately), time of flight, time of flight divided by advance range, dead time, change of range during dead time, change of range during dead time, fuze range, complementary error correction to elevation prediction, elevation prediction for relative movement of ship and target, elevation prediction to compensate for effect of wind on projectile, predicted target elevation, super-elevation, elevation parallax due to 30 ft. vertical base, correction to super-elevation for change in initial velocity from 2550 f.s., sight angle, angular correction for projectile drift, deflection correction for effect of apparent wind on projectile, deflection correction for effect of relative movement of own ship & target, sight deflection, approximate correction to gun train for effect of trunnion tilt, partial deflection in deck plane, total deflection in deck plane, correction to gun elevation order for effect of trunnion tilt.

Tracking quantities

- Trunnion tilt quantities: Approximate correction to gun train for effect of trunnion tilt, partial deflection in deck plane, total deflection in deck plane, correction to gun elevation order for effect of trunnion tilt.

Other quantities

- Other quantities: Own ship's speed, target course, target course in degrees, target ground speed, own ship's speed in knots, director train or relative target bearing, director sight elevation, cross-level angle in minutes, director sight elevation receiver, director sight elevation, cross-level angle in minutes.



LIST OF SYMBOLS table with columns for symbol and description. Symbols include flow lines, electrical connections, assembly clamps, light stops, friction drives, servo motors, and various control mechanisms.

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- Output descriptions: Bgr in, Fn, Egr in, F, Ph, Pv, Vs, Eg, Bgr, Ds. Each entry describes the function of the corresponding output signal, such as 'STAR SHELL GUN TRAIN ORDER', 'FUZE SETTING ORDER', 'TRAIN PARALLAX CORRECTION', etc.

RESTRICTED