

Full CPN Model

I. DECLARATIONS

- 1) colset SwitchPos= with position—reverse timed;
- 2) colset orders =with Order—Convert—Lock—Occupy—Release timed;
- 3) colset Command= product SwitchPos*orders timed;
- 4) colset StateRes=with free—lock—occupy—convert—release timed;
- 5) colset ResourceSwitch = product SwitchPos*StateRes timed;
- 6) colset ResourceResult = product ResourceSwitch*orders timed;
- 7) colset TypeRes= with track—switch;
- 8) colset Approach = product TypeRes*INT;
- 9) colset ApproachList = list Approach timed;
- 10) var sw,sw':SwitchPos;
- 11) var or:orders;
- 12) var sta:StateRes;
- 13) var n,num,num1,num2:INT;
- 14) var approa:ApproachList;
- 15) fun TR_Time()=discrete(500, 2000);
- 16) fun TT_Time()=round(1000.0*exponential(9.2103));
- 17) fun G_Time()=round(1000.0*exponential(26.0802));
- 18) fun T_Handle()=discrete(0, 500);
- 19) fun R_Handle()=discrete(100, 300);
- 20) fun I_Handle()=discrete(0, 200);
- 21) val ChangePosition=5500;
- 22) val CaNewMA=1000;



Fig. 3. RMU command

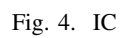


Fig. 4. IC