A2A Comanche 250

variables list and notes for simpit builders

Gauges:

(L:AirspeedNeedle,mph) - airspeed needle

(A:ATTITUDE INDICATOR PITCH DEGREES:1,degrees) - artificial horizon, attitude
(A:ATTITUDE INDICATOR BANK DEGREES:1,grad) - artificial horizon, bank

(A:INDICATED ALTITUDE:1,feet) 1000 % 10 / 100 + - altimeter needle (hundreds feet) (range: 0 –200)
(A:INDICATED ALTITUDE:1,feet) 10000 % 100 / 100 + - altimeter needle (thousands feet) (range: 0 –200)
(A:INDICATED ALTITUDE:1,feet) 100000 % 1000 / 100 + - altimeter needle (ten thousands feet) (range: 0 –200)

(A:KOHLSMAN SETTING MB,mbar) 0.7353 * 697.1 - - Kohlsman knob in inHg (range: 0 – 100)

(L:Nav2ObsNeedle,number) - nav2 obs (range: 0 -180) – read only – inc/dec by default events (>K:VOR2_OBI_INC) and (>K:VOR2_OBI_DEC)
(L:GsiNeedle,keyframe) - glideslope indicator (range: 0 – 100)
(L:Gsi2Needle,keyframe) - glideslope indicator (range: 0 – 100)
(L:FlagGSI,enum) - glideslope indicator flag (1 – off, 0 – on)
(L:Gsi2Flag,enum) - glideslope indicator flag (0 – off, 1 – on)
(L:CdiNeedle,keyframe) - course deviation indicator (range: 0 – 100)
(L:Cdi2Needle,keyframe) - course deviation indicator (range: 0 – 100)
(L:ToFromNeedle,enum) - to/from flag (0 – off, 1 – to, 2 – from)
(L:ToFrom2Needle,enum) - to/from flag (0 – off, 1 – to, 2 – from)

(L:FuelLeftWingTank,gallons) - left fuel tank
(L:FuelRightWingTank,gallons) - right fuel tank

(L:Eng1_EGTGauge,number) - exhaust gas temp in F
(L:Eng1_GPH,gallons) - fuel flow in gallons per hour

(L:Eng1_OilTemp,fahrenheit) - oil temp in F
(L:Eng1_OilPressure,psi) - oil pressure in psi

(A:SUCTION PRESSURE,inHg) - suction
(L:Ammeter1,amps) - ammeter

(A:DELTA HEADING RATE,degrees per second) 1.1 * -10 max 10 min 10 + 5 * - turn indicator (range: 0 – 100)
(A:TURN COORDINATOR BALL,position) -1 max 1 min 1 + 25 * - ball (range: 0 – 50)

(L:HeadingSelected,degrees) - heading bug – read only – inc/dec by default events (>K:HEADING_BUG_INC) and (>K:HEADING_BUG_DEC)
(L:HeadingGyro,degrees) - gyro heading
(A:VERTICAL SPEED,feet per minute) - vertical speed indicator

(L:Eng1_RPM,RPM) - engine rpm
(L:e1Hour4,number) - engine hours, thousands

(L:e1Hour3,number) - engine hours, hundreds

(L:e1Hour2,number) - engine hours, tens

(L:e1Hour1,number) - engine hours, ones

(L: e1HourFract1,number) - engine hours, tenths

(L:Adf1Needle,number) - adf heading – read only – inc/dec by default events (>K:ADF_CARD_INC) and (>K: ADF_CARD _DEC)

(L:AdfCdiNeedle,keyframe) - ADF course deviation needle

(A:WISKEY COMPASS INDICATION DEGREES,degrees) - Whiskey compass

Switches:

(L:Battery1Switch,bool) - master battery switch

(>K:TOGGLE_ELECT_FUEL_PUMP1) - fuel pump

(L:BeaconLightSwitch,bool) - beacon light

(L:LandingLightRightSwitch,bool) - landing light

(L:LandingLightLeftSwitch,bool) - landing light

(L:NavInstrLightSwitchPct,percent) - nav / instrument lights

(L:StrobeLightSwitch,bool) - strobe light

(L:PitotHeatSwitch,bool) - pitot heat

(L:GpsNavSelector,bool) - GPS/NAV switch. 0 - nav, 1 - gps

(L:Eng1_StarterSwitch,bool) - starter button.

(L:Magnetos1,enum) - magnetos. 0 - off, 1 - right, 2 - left, 3 both

(L:FSelComancheLeft,percent) - fuel selector.

(L:FSelComancheRight,percent) - fuel selector.

(A:ELEVATOR TRIM PCT,percent) - elevator trim position– read only – inc/dec by default events (>K:ELEV_TRIM_DN) and (>K:ELEV_TRIM_UP)

(L:CabinFlood1LightSwitch,bool) - white dome light front

(L:CabinFlood2LightSwitch,bool) - white dome light rear

(L:CabinRedLightSwitch,bool) - red dome light

(L:Throttle1Position,percent) - throttle lever (range: 0 – 100)

(L:Eng1_MixtureManualLever,percent) - mixture lever (range: 0 – 100)

(L:LandFlapsPos,enum) - flaps position lever (0 – up, 1 – 1/3, 2 – 2/3, 3 – down)

(L:Eng1_CarbHeatSwitch,percent) - carb heat lever (range: 0 - 100)

(L:CabinTempControl,percent) - cockpit heat (range: 0 – 100)

(L:WindowDefrosterControlKnob,percent) - windshield defroster (range: 0 -100)

(L:CabinVentLeftLever,percent) - cockpit ventilation [main panel] (range: 0 – 100)

(L:CabinVentRightLever,percent) - cockpit ventilation [main panel] (range: 0 – 100)

(L:CabinVent1Lever,percent) - cockpit ventilation [left side] (range: 0 – 100)

(L:CabinVent1Nozzle,percent) - cockpit ventilation nozzle [left side] (range: -100 – 100)

(L:CabinVent2Lever,percent) - cockpit ventilation [right side] (range: 0 – 100)

(L:CabinVent2Nozzle,percent) - cockpit ventilation nozzle [right side] (range: -100 – 100)

(>K:PARKING_BRAKES) - default parking brakes event

Autopilot:

(L:ApMaster,bool) - master switch

(L:ApModeYokeSwitch,bool) - mode button (yoke). Cycle modes by setting it to 1 and back to 0

(L:ApAltSwitch,bool) - alt. hold button (yoke). Trigger alt hold by setting it to 1 and back to 0

(L:ApDisconnectSwitch,bool) - dsiconnect button (yoke). Set it to 1 and back to 0.

(L:ApModePushSwitch,bool) - mode knob (bazel). Cycle modes by setting it to 1 and back to 0

(L:ApTurnKnob,percent) - turn knob (bazel). Range -50 - 50.

Radiostack:

NARCO CP 136 TSO Audioselector:

(L:AudioCom1HpSwitch,bool)

(L:AudioCom2HpSwitch,bool)

(L:AudioBothHpSwitch,bool)

(L:AudioNav1HpSwitch,bool)

(L:AudioNav2HpSwitch,bool)

(L:AudioAdf1HpSwitch,bool)

(L:AudioMkrHpSwitch,bool) - Marker / DME audio.

(L:AudioSpkrSwitch,bool)

(L:AudioMkrMuteSwitch,bool)

(L:MarkerOuterLight,bool)

(L:MarkerMiddleLight,bool)

(L:MarkerInnerLight,bool)

NARCO NCS812 TSO Com1/Nav1/DME unit:

(L:Com1OnOff,bool)

(L:Com1FreqOuterKnob,percent) - range: 0 - 100

(L:Com1FreqInnerKnob,percent) - range: 0 -100

(L:Com1StbySwitch,bool)

(L:Nav1Ident,bool)

(L:Nav1FreqOuterKnob,percent) -range: 0 – 100

(L:Nav1FreqInnerKnob,percent) -range: 0 – 100

(L:Nav1StbySwitch,bool)

(L:DmeFunctionPct,percent)

NARCO NCS812 TSO Com2/Nav2/DME unit:

(L:Com2OnOff,bool)

(L:Com2FreqOuterKnob,percent) - range: 0 - 100

(L:Com2FreqInnerKnob,percent) - range: 0 -100

(L:Com2StbySwitch,bool)

(L:Nav2Ident,bool)

(L:Nav2FreqOuterKnob,percent) -range: 0 – 100

(L:Nav2FreqInnerKnob,percent) -range: 0 – 100

(L:Nav2StbySwitch,bool)

NARCO ADF 841 TSO unit:

(L:AdfOnOffKnob,bool)

(L:AdfFrqButton,bool) - freq. transfer button

(L:AdfModeSelectSwitch,enum)

(L:AdfFreqOuterKnob,percent) - range: 0 – 100

(L:AdfFreqInnerKnob,percent) - range: 0 – 100

KT76A transponder unit:

(L:XpdrModeKnobPos,enum) 0 = off, 1 = Standby, 2 = On, 3 = Alt, 4 = Test

(L:XpdrIdentSwitch,bool)

1 knob - default XPNDR_1_INC and XPNDR_1_DEC events

10 knob - default XPNDR_10_INC and XPNDR_10_DEC events

100 knob - default XPNDR_100_INC and XPNDR_100_DEC events

1000 knob - default XPNDR_1000_INC and XPNDR_1000_DEC events

FSX GNS400 GPS:

gps_on_switch - toggle (L:GpsOnSwitch,bool), (>K:GPS_POWER_BUTTON) and (>K:GPS_CLEAR_ALL_BUTTON)

NRST button - (>K:GPS_NEAREST_BUTTON)

OBS button - (>K:GPS_OBS_BUTTON)

MSG button - (>K:GPS_MSG_BUTTON)

FPL button - (>K:GPS_FLIGHTPLAN_BUTTON)

TERR button - (>K:GPS_TERRAIN_BUTTON)

PROC button - (>K:GPS_PROCEDURE_BUTTON)

RNG plus button - (>K:GPS_ZOOMOUT_BUTTON)

RNG minus button - (>K:GPS_ZOOMIN_BUTTON)

D button - (>K:GPS_DIRECTTO_BUTTON)

MENU button - (>K:GPS_MENU_BUTTON)

CLR button - toggle (>K:GPS_CLEAR_BUTTON) event and increase (L:GpsClrSwitchCounter,enum) by one.
If (L:GpsClrSwitchCounter,enum) is equal 90 toggle (>K:GPS_CLEAR_ALL_BUTTON) event and reset the counter.

ENT button - (>K:GPS_ENTER_BUTTON)

GPS outer knob - (L:GpsOuterKnob,percent) for knob rotation in VC, use (>K:GPS_GROUP_KNOB_DEC) and
(>K:GPS_GROUP_KNOB_INC) events for GPS function.

GPS inner knob - (L:GpsInnerKnob,percent) for knob rotation in VC, use (>K:GPS_PAGE_KNOB_DEC) and
(>K:GPS_PAGE_KNOB_INC) events for GPS function.

GPS inner knob push - toggle (L:GpsInnerKnobPush,bool) for VC animation, use (>K:GPS_CURSOR_BUTTON) event for GPS function.

Misc:

Headphones simulation:

To set the headphones on three things are needed in this sequence:

(L:Headphones,bool) set to 1; (L:SystemCondSelectFSX,number) set to 57; (L:SystemCondValueFSX,number) set to 1

To set the headphones off these three variables has to be set in this sequence:

(L:Headphones,bool) set to 0; (L:SystemCondSelectFSX,number) set to 57; (L:SystemCondValueFSX,number) set to 0