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In-time Aviation Safety Management System (*IASMS*)

UTM
Weather Services
LAANC

Runtime detection &
diagnostics of anomalous
2 flight patterns

Discovery & monitoring
of unsafe feature
3 interactions

4 Fault Trees, Safety
Assurance Cases

1 Research data sets

Runtime monitoring system

sUAS Environmental Awareness



sUAS Hardware and Features



Name	Description	Min > Max (Units)	Default	Units
NRW_AH_ALT (F1,DAT)	Airfield home alt Comment: Altitude of airfield home waypoint	<0 > 7103.01	600.0	m
NRW_AH_LAT (R7,D2)	Airfield home Lat Comment: Latitude of airfield home waypoint	-90.0000000 > 90.0000000	-2103479.10	deg " lat
NRW_AH_LONG (R7,D2)	Airfield home Lon Comment: Longitude of airfield home waypoint	-180.0000000 > 180.0000000	1110421239	deg " lat
NRW_DRLL_AH_T (F1,DAT)	Airfield home wait time Comment: The amount of time in seconds the system should wait at the airfield home waypoint			s
NRW_DRLL_CHKSK (R7,D2)	Slip corners hold-up Comment: If set to 1 the system will skip the corners hold-up on data link loss and will directly fly to airfield home			

PIC Human Factors



sUAS Runtime



Flight logs
&
annotate
d data