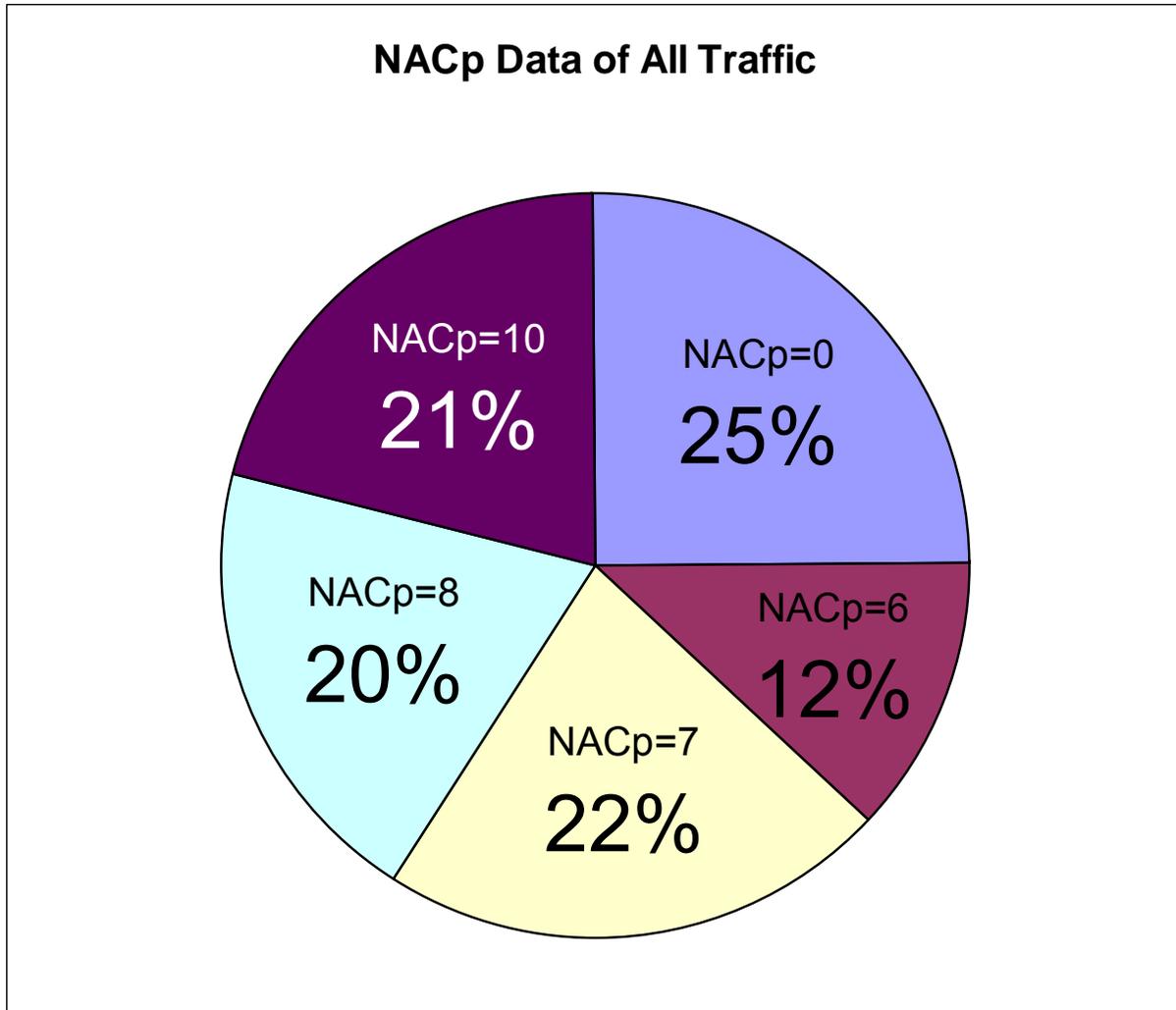


NAC_p data of all traffic collected at Louisville:



Unfortunately, ground traffic that have a NIC < 8 (equivalent to NUC_p < 7) will be considered equal to 0 since surface position squitters don't encode below a NIC value of 8. Table 1 shows what would be typically transmitted for ground traffic based on these HPL levels. Including NAC_p for DO-260 (Ver 0).

Table 1: Surface Position NIC & NAC_p Values

HPL	Type Code for (Surface Position Message)	NIC (Gnd Traffic)	DO-260 (Ver 0) NAC _p (Gnd Traffic)
< 7.2 m	5	11	11
< 25 m	6	10	10
< 185.2 m	7	8	8
≥ 185.2 m	8	0	0

Table 2 represents the current traffic accuracy and integrity requirements for ASSA/FAROA. Based on an approximate traffic distribution at Louisville, about 80% of all ADS-B equipped aircraft are either invalid (not displayed) or degraded. The majority of aircraft that have a $NAC_P \geq 9$ are from UPS aircraft that are equipped with WAAS GPSs; therefore, other locations (away from UPS's main hub in Louisville) may have even less valid ground traffic.

Table 2: Current Requirements for ASSA/FAROA

Accuracy Thresholds:

Traffic%	60%								20%	20% (2/3 are UPS with WAAS)			
CDTI Symbol	Invalid (Not Displayed)								Degraded 	Valid 			
NAC_P (95%)	0	1	2	3	4	5	6	7	8	9	10	11	
	10 NM	4 NM	2 NM	1 NM	0.5 NM	0.3 NM	185.2 m	92.6 m	30 m	10 m	3 m		

Integrity Thresholds:

CDTI Symbol	Degraded 								Valid (2/3 are UPS with WAAS) 			
NIC	0	1	2	3	4	5	6	7	8	9	10	11
	20 NM	8 NM	4 NM	2 NM	1 NM	0.6 NM	370.4 m	185.2 m	75 m	25 m	7.5 m	
SIL	0								≥ 1 ($\leq 10^{-3}$)			