

# Civil Air Patrol



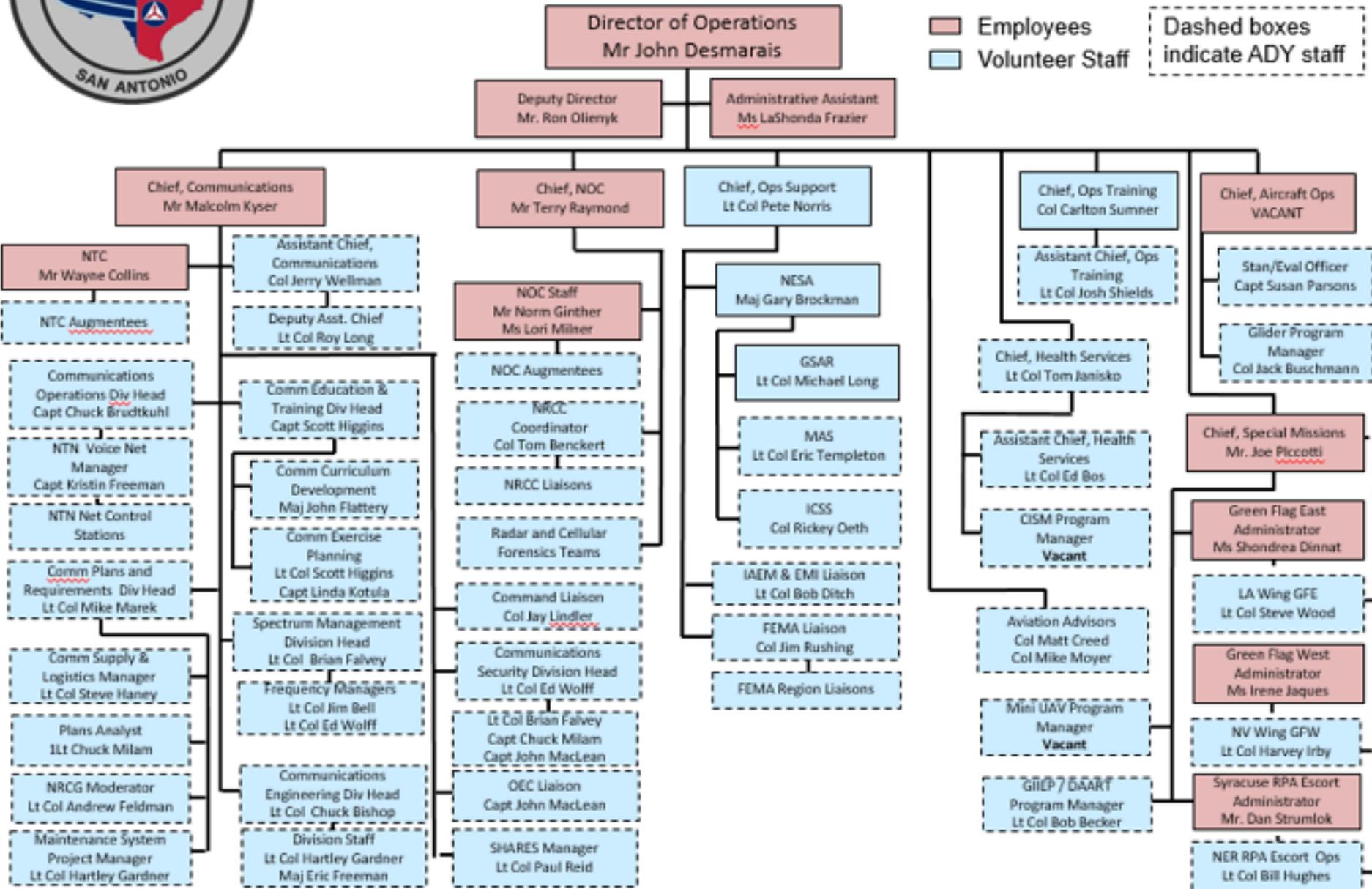
## Operations Update

**John “Moose” Desmarais**  
**Director of Operations**



# CAP/DO Organizational Chart

Employees  
 Volunteer Staff  
Dashed boxes indicate ADY staff





# Final Powered Flying FY15 vs FY16

AFAM Mission Types	FY15	FY16	% Difference	% Goal	Status
DSCA/DR	297	1,130	281%	113%	Blue
AFROTC	40	148	267%	99%	Green
AFJROTC	324	443	37%	89%	Red
Air Defense	1,164	1,390	19%	126%	Blue
SUAS	996	1,168	17%	117%	Blue
Other / HLS	5,369	6,221	16%	148%	Blue
Maintenance	8,080	8,972	11%	120%	Blue
Drug Interdiction	9,186	9,693	6%	97%	Green
Training	36,639	37,651	3%	94%	Yellow
Cadet Orientation	10,885	10,825	-1%	75%	Red
SAR	1,828	1,741	-5%	102%	Green
Route Survey	836	700	-16%	117%	Blue
Range Support	428	336	-21%	84%	Red
<b>AFAM Total</b>	<b>76,070</b>	<b>80,418</b>	<b>6%</b>	<b>98%</b>	Green
<b>Liaison Flying</b>	<b>1,932</b>	<b>2,463</b>	<b>28%</b>	<b>123%</b>	Green
<b>Corporate Flying</b>	<b>19,426</b>	<b>22,033</b>	<b>13%</b>	<b>100%</b>	Green
<b>Total Flying</b>	<b>97,428</b>	<b>104,914</b>	<b>8%</b>	<b>99%</b>	Green



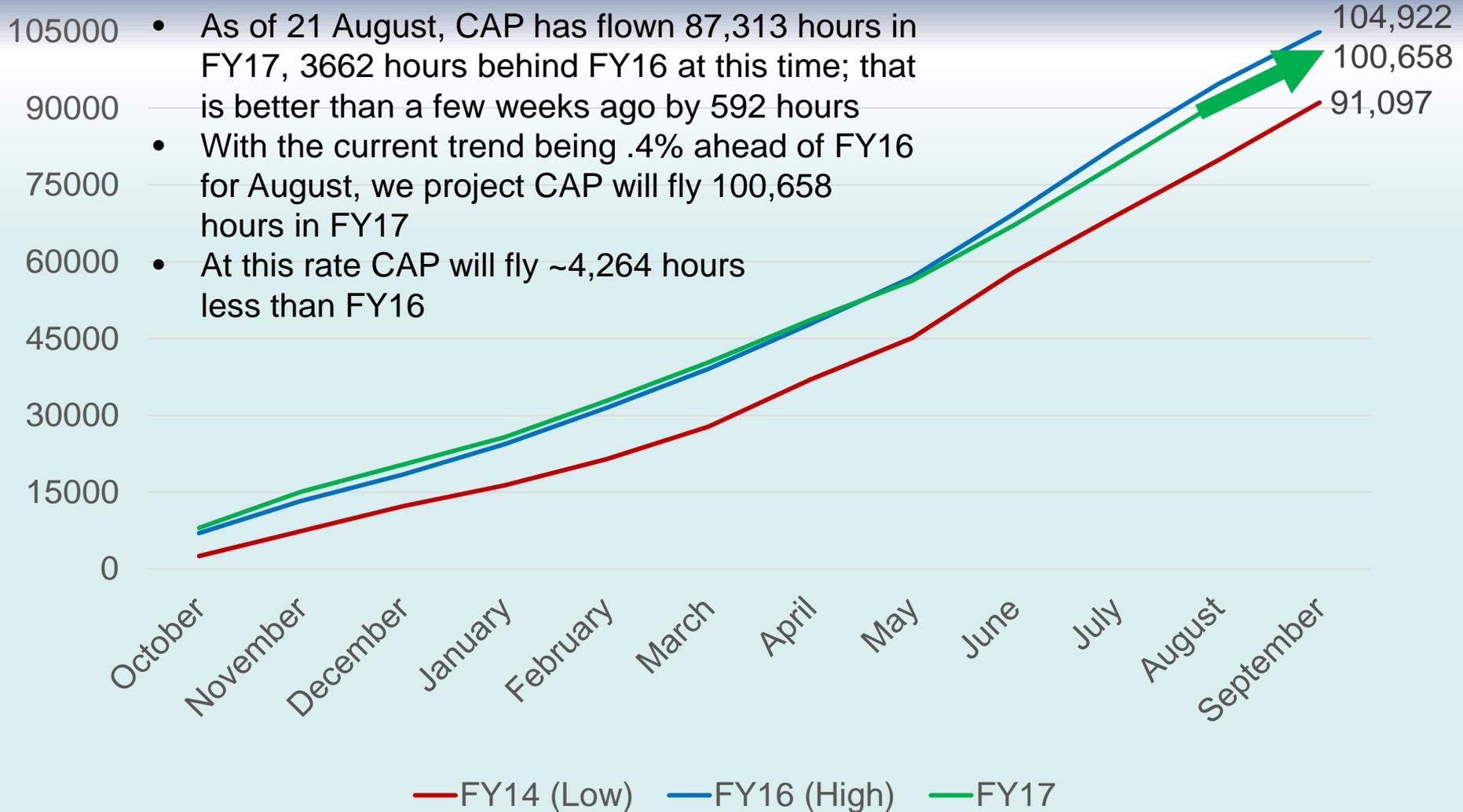
# Powered Flying FY16 vs FY17 as of 24 August

AFAM Mission Types	FY16	FY17	% Difference	% Goal	Status
AFROTC	126	481	281%	241%	Blue
Range Support	301	809	169%	231%	Blue
AFJROTC	443	677	53%	135%	Blue
DSCA / DR	1,054	1,605	52%	107%	Blue
Other / HLS	5,427	6,349	17%	98%	Blue
Air Defense	1,217	1,319	8%	94%	Blue
SUAS	1,063	1,140	7%	88%	Green
SAR	1,544	1,615	5%	95%	Blue
Cadet Orientation	9,433	9,515	1%	84%	Yellow
Maintenance	7,965	7,955	0%	94%	Yellow
Route Survey	634	577	-9%	77%	Yellow
Training	33,118	26,975	-19%	67%	Red
Drug Interdiction	7,564	4,959	-34%	62%	Red
<b>AFAM Total</b>	<b>69,889</b>	<b>63,979</b>	<b>-9%</b>	<b>78%</b>	Yellow
<b>Liaison Flying</b>	<b>2,113</b>	<b>1,740</b>	<b>-18%</b>	<b>70%</b>	Red
<b>Corporate Flying</b>	<b>20,060</b>	<b>21,403</b>	<b>7%</b>	<b>93%</b>	Green
<b>Total Flying</b>	<b>92,062</b>	<b>87,122</b>	<b>-5%</b>	<b>81%</b>	Yellow



# FY17 Flying Hours Trend

Current As of 21 August 2017





# FY16 Utilization Rates

Rank	Wing	Rate
1	NC	305.8
2	NH	291.7
3	CT	290.9
4	GA	274.4
5	SER	257.4
6	DC	250.8
7	VT	248.9
8	TN	245.2
9	FL	241.2
10	NER	240.7
11	AZ	239.5
12	MI	237.4
13	CA	228
14	NJ	222.4
15	WV	222.3
16	NM	222.1
17	WI	216.4

Rank	Wing	Rate
18	IN	215.9
19	LA	207.2
20	PA	203.4
21	SC	203.2
22	KY	201.1
23	OH	196.3
24	RI	194.4
25	ME	192.8
26	MD	192.2
27	OK	190.2
28	VA	189.8
29	IL	186.6
30	NY	186.6
31	CO	184.2
32	TX	183
33	RMR	180.3
34	AL	177.3

Rank	Wing	Rate
35	DE	174.1
36	MA	173.9
37	MT	173.4
38	SD	171.2
39	OR	170.5
40	ND	164.4
41	PR	163.5
42	MER	162.2
43	MN	159.4
44	MS	158
45	AR	133.4
46	NV	133
47	NE	131.2
48	ID	127.3
49	WY	126.7
50	KS	118.5
51	WA	117.2

Rank	Wing	Rate
52	MO	112.4
53	HI	107.6
54	IA	103.3
55	UT	90.5
56	AK	80.4
57	NCR	60.2
58	CNG	51.7

Goal: 200  
Hours Per  
Aircraft

Result: 186.2  
Hours Per  
Aircraft



# FY17 Utilization Rates

1 October through 31 July CAPF 18 Reports

Current As of 21 August 2017

Rank	Wing	Rate
1	NC	277.0
2	CT	224.2
3	PR	203.8
4	DC	190.6
5	FL	188.8
6	SD	184.7
7	NH	184.1
8	GA	183.7
9	VT	180.8
10	VA	178.3
11	AZ	176.5
12	MD	172.0
13	WI	170.3
14	LA	165.8
15	OH	163.8
16	NM	163.7
17	TX	162.3

Rank	Wing	Rate
18	WV	161.1
19	MI	160.9
20	MA	157.3
21	CA	156.9
22	TN	153.8
23	MN	147.8
24	OK	147.6
25	SC	145.6
26	MS	145.3
27	DE	143.3
28	NE	142.1
29	RMR	140.7
30	AL	133.7
31	IL	133.4
32	NJ	132.6
33	KS	130.3
34	CO	127.6

Rank	Wing	Rate
35	OR	127.0
36	NY	125.7
37	IN	122.8
38	NCR	119.1
39	PA	117.2
40	AR	115.9
41	SER	115.4
42	MO	109.5
43	KY	105.4
44	MT	104.8
45	ND	104.3
46	NV	103.3
47	ME	100.4
48	WA	91.9
49	WY	85.6
50	UT	82.9
51	HI	79.8

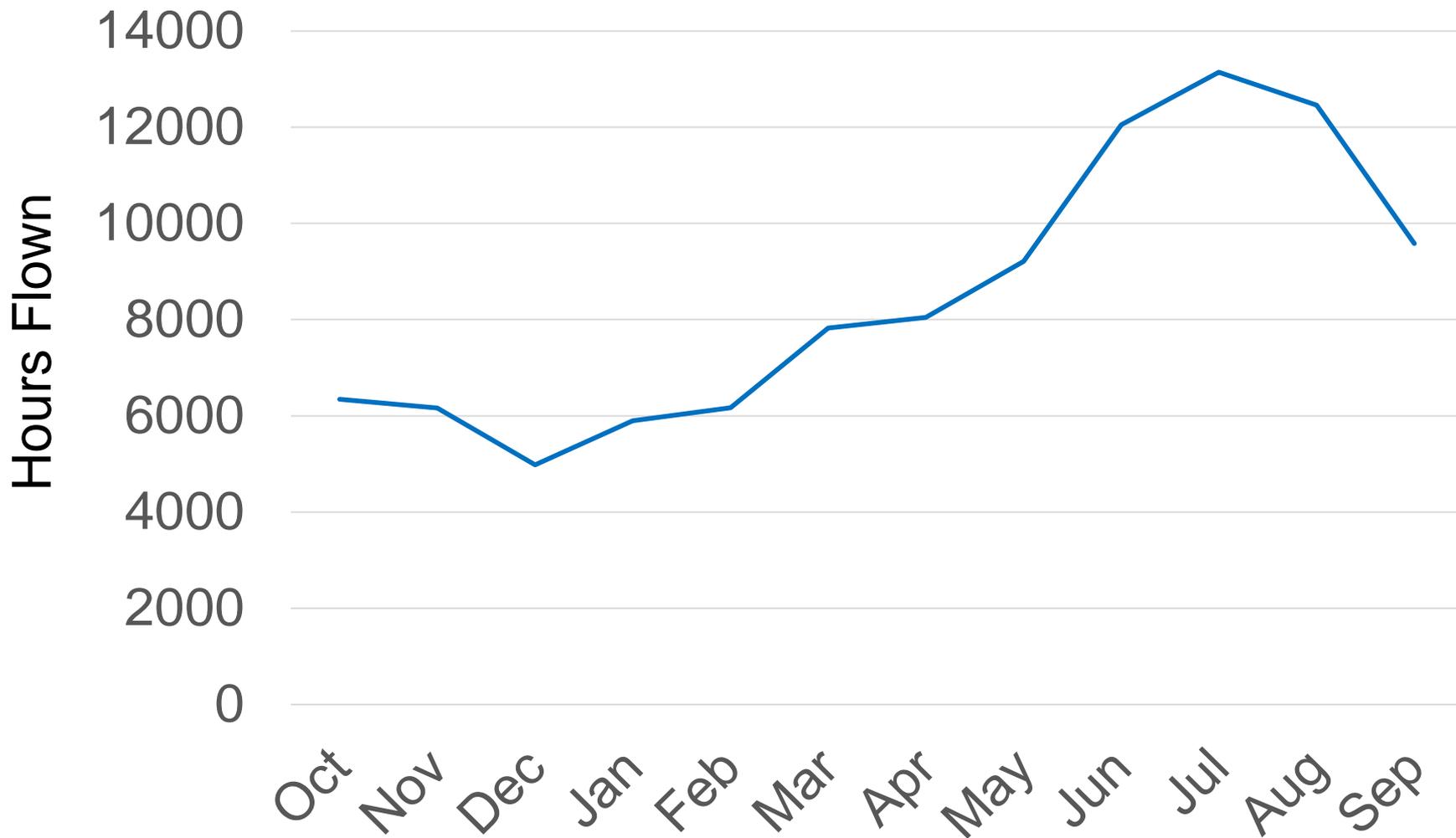
Rank	Wing	Rate
52	AK	73.9
53	RI	66.7
54	IA	62.3
55	ID	47.8
56	CNG	46.2
57	NER	43.9

Goal: 166.6  
Hours Per  
Aircraft

Results: 141.2  
Hours Per  
Aircraft

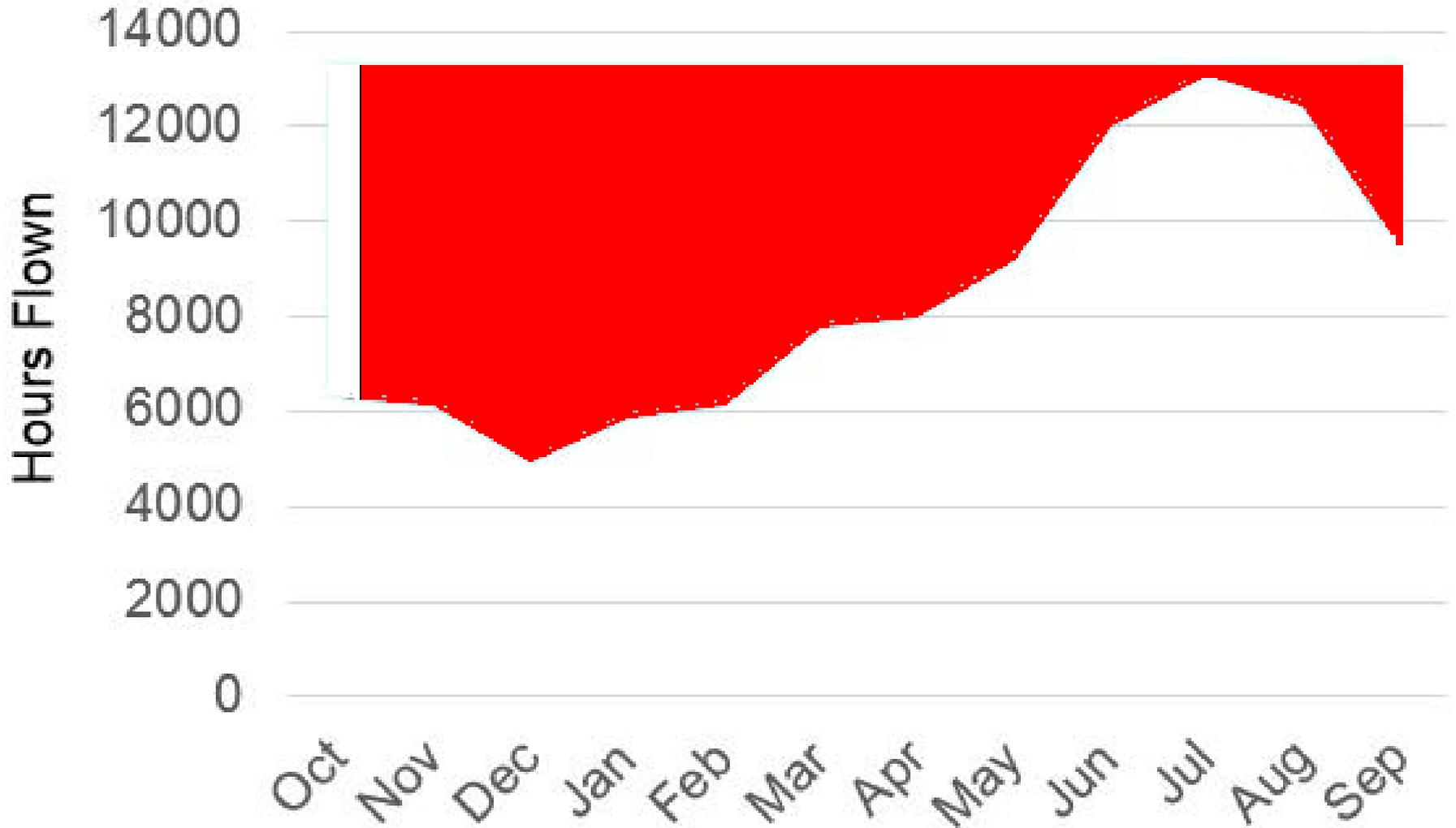


# When does CAP fly?



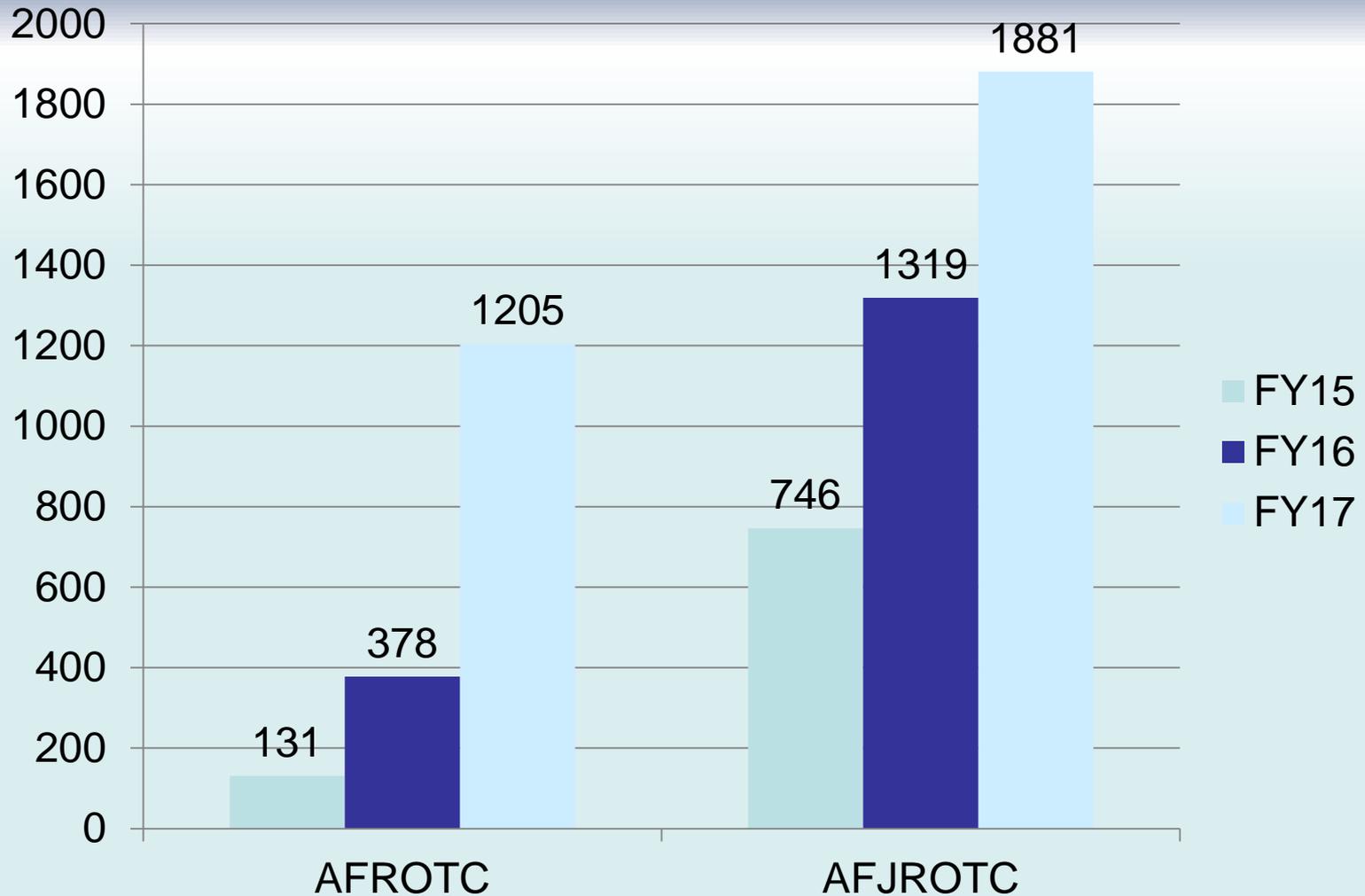


# CAP's Lost Flying Opportunities





# AFROTC & AFJROTC Cadets Flown





# Search & Rescue



- Missions are changing, but definitely not going away
- CAP is credited with saving 105 lives this FY; 101 with cell forensics or radar analysis support



0902 EDT 28-Aug



1 Save credited for assisting the USCG on 28 August

FOR CAP-NRAT APPROVED USE ONLY

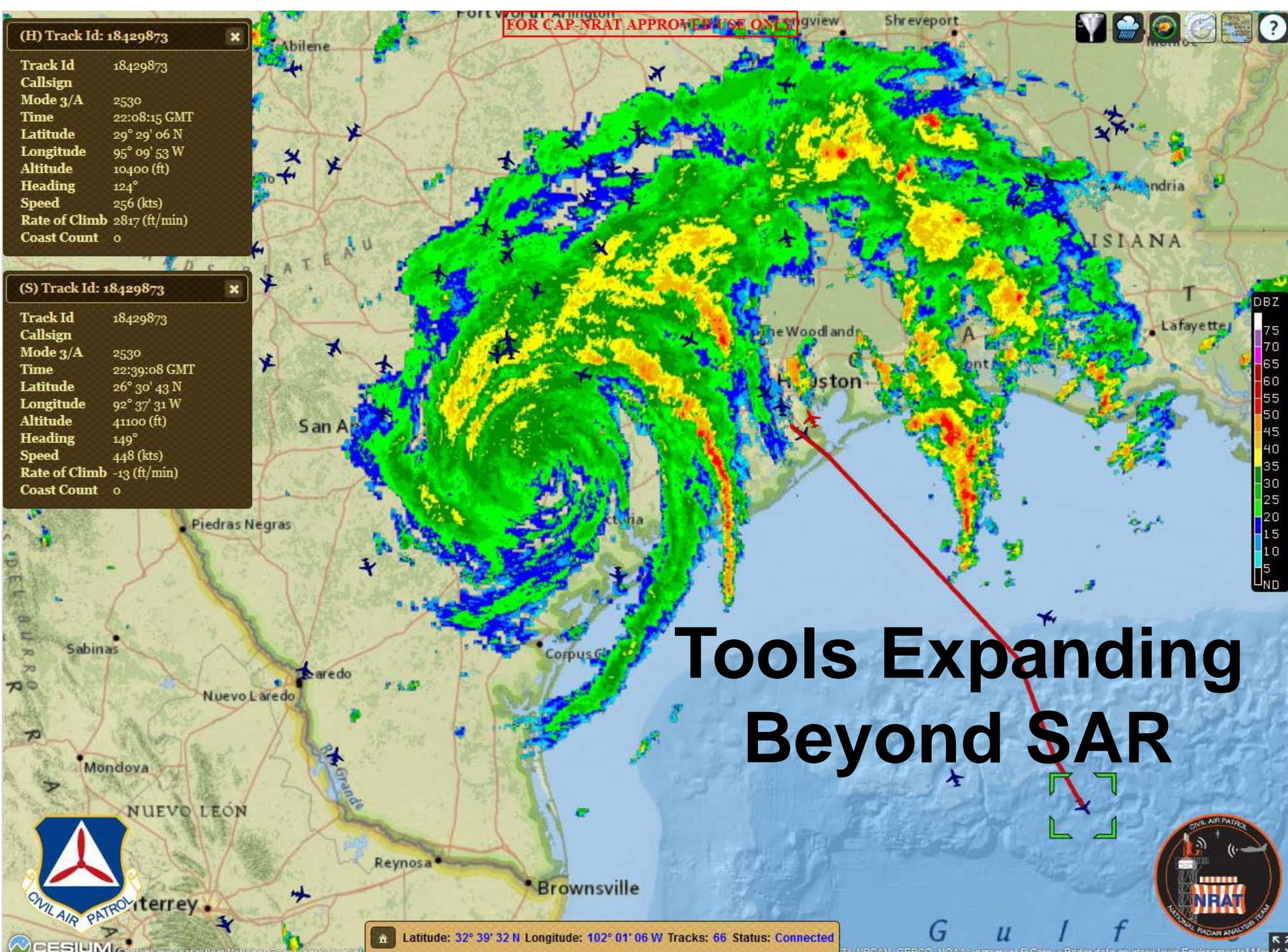


(H) Track Id: 18429873

Track Id	18429873
Callsign	
Mode 3/A	2530
Time	22:08:15 GMT
Latitude	29° 29' 06 N
Longitude	95° 09' 53 W
Altitude	10400 (ft)
Heading	124°
Speed	256 (kts)
Rate of Climb	2817 (ft/min)
Coast Count	0

(S) Track Id: 18429873

Track Id	18429873
Callsign	
Mode 3/A	2530
Time	22:39:08 GMT
Latitude	26° 30' 43 N
Longitude	92° 37' 31 W
Altitude	41100 (ft)
Heading	149°
Speed	448 (kts)
Rate of Climb	-13 (ft/min)
Coast Count	0

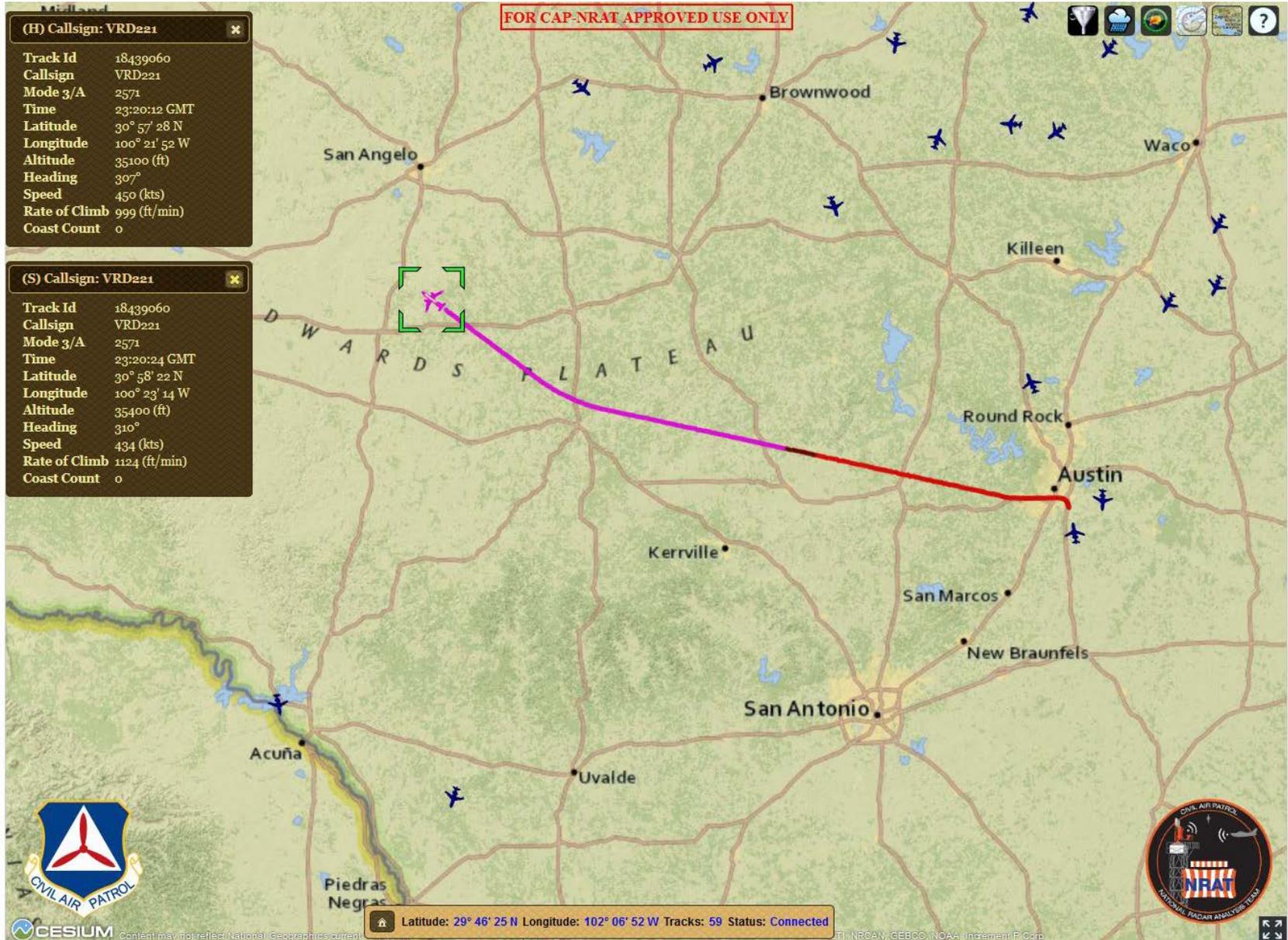


# Tools Expanding Beyond SAR



Latitude: 32° 39' 32 N Longitude: 102° 01' 06 W Tracks: 66 Status: Connected

# Mission Sandbox – Tracking Aircraft





# Disaster Relief Operations



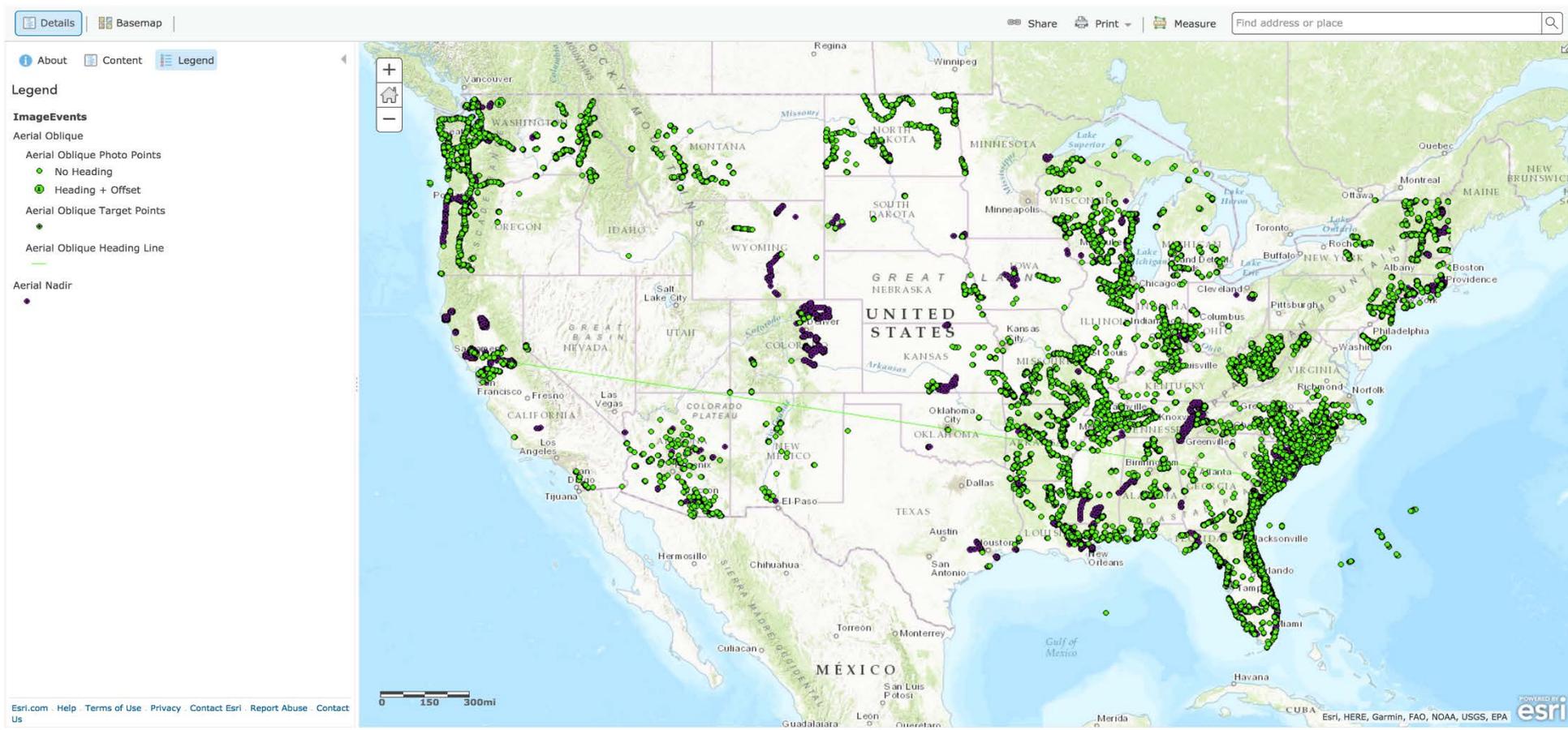
- This has been a busy year for disasters 62 missions with 3 more pending
- Would not be surprised to see 500+ hours flown in support of Hurricane Harvey Operations
- Continuing to refine our toolkit and maintain or develop relationships for joint operations



# FEMA Hosts CAP Imagery

Home ▾ Civil Air Patrol Photos

Modify Map & Sign In





# FEMA Wants CAP Imagery



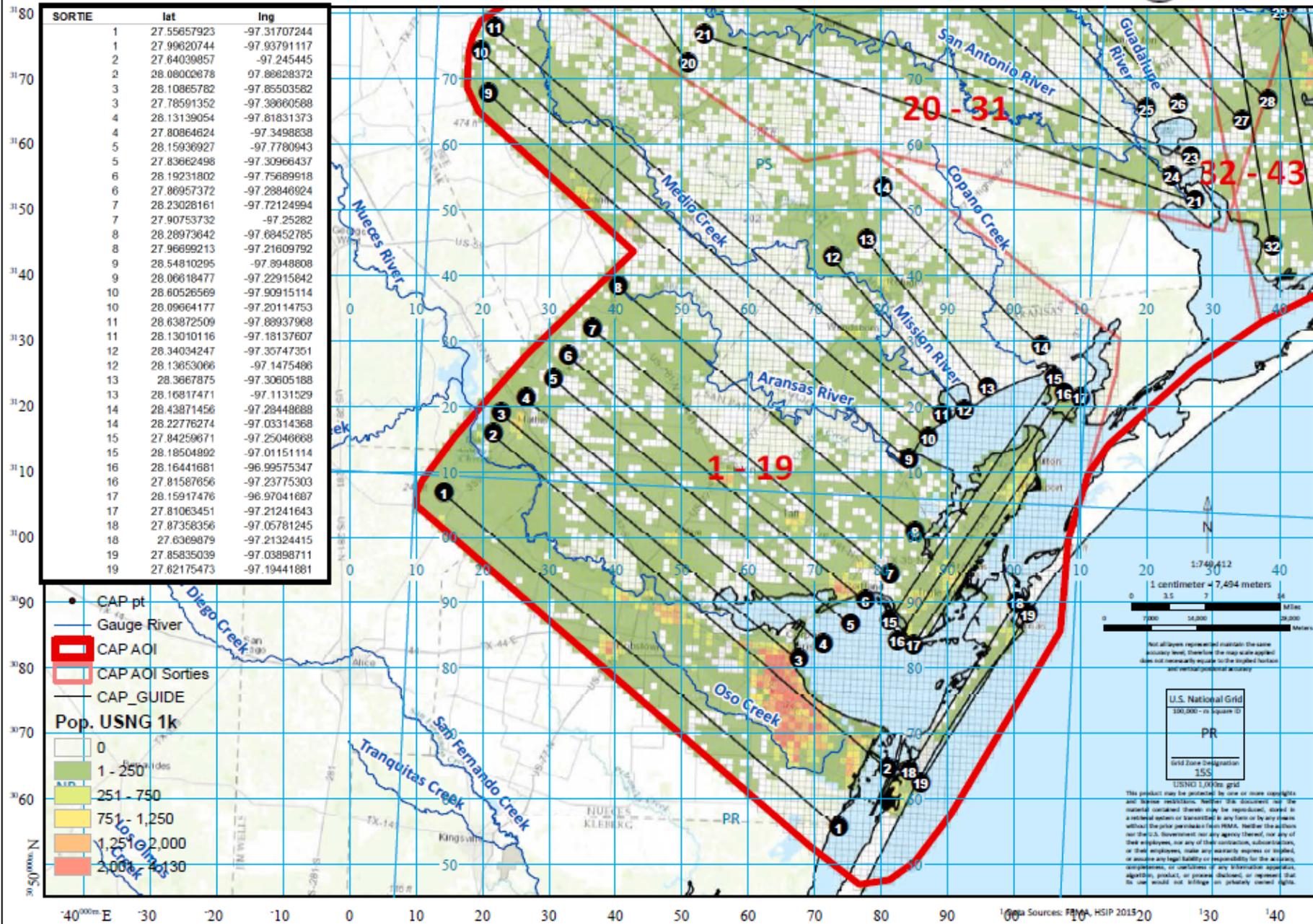
Comparing Nikon D-7100  
Oblique Imagery to Garmin Virb  
Nadir Imagery Collected during  
the 2016 South Carolina  
Flooding by CAP



# Hurricane Harvey - CAP GUIDANCE Sortie 1 - 19: (26 August 2017, 0800 EST)

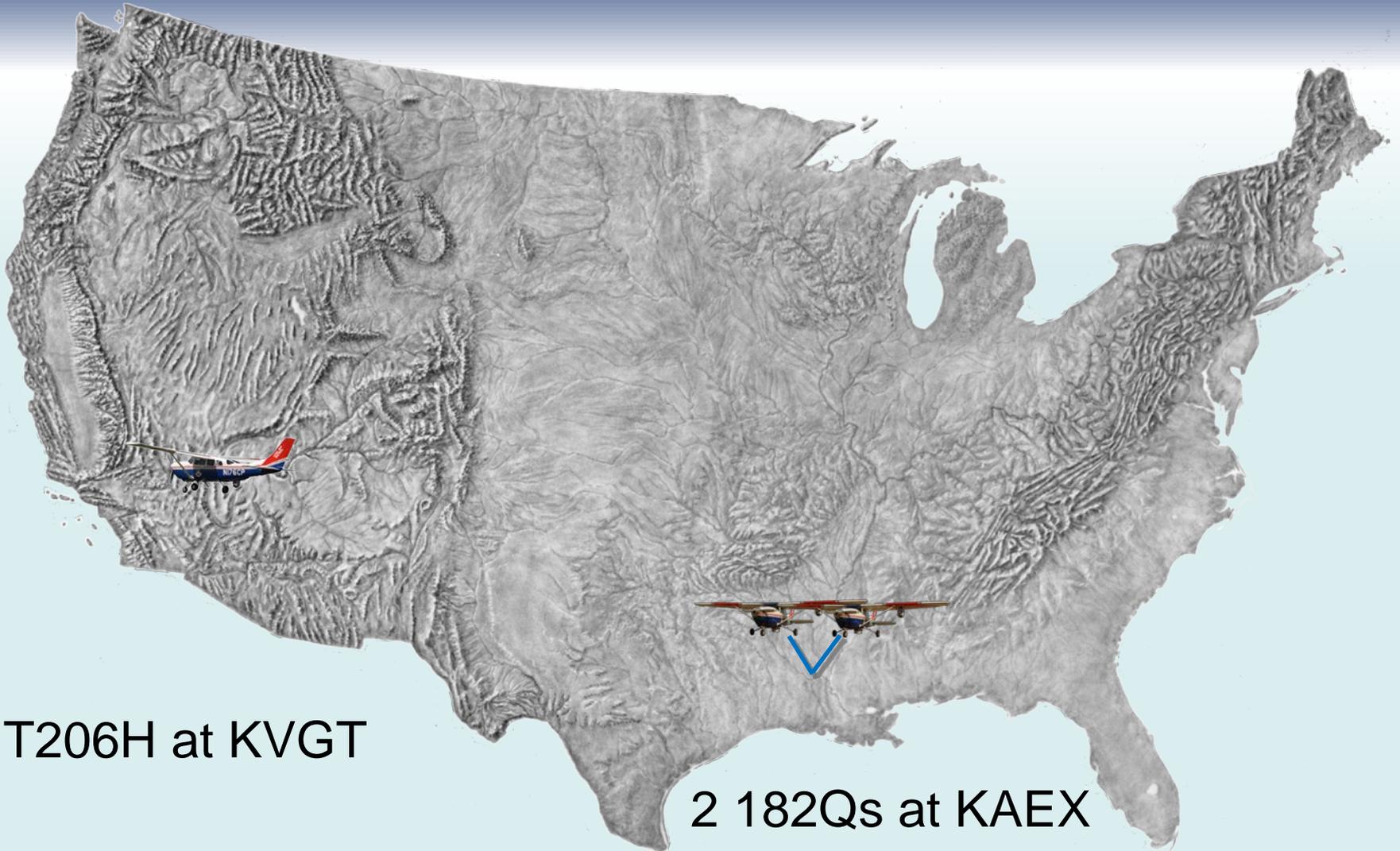
State of Texas

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# SUAS Operating Locations



1 T206H at KVGTT

2 182Qs at KAEX



# SUAS Program



**2 Cessna 182Qs**

- Supporting 19 exercises a year
  - 9 GFE
  - 9 GFW
  - Emerald Warrior
- Flying about 1,300 hours



**1 Cessna T206H**



# RPA Escort Program

- **Flying 4 to 6 days a week out of Syracuse, NY supporting 108 ATKS**
  - **1,122 total hours flown (966 this FY)**
  - **CAP has directly supported the qualifying of over 130 MQ-9 Reaper students**
- **Requests from sister units in Fargo, ND and Ellington, TX are expected to start operations in the second quarter of FY18**
- **Anticipate these missions lasting a year or longer**





# Inexpensive Mini UAV Applications for CAP



Imagery collected is then merged  
into a mosaic for GIS use





# Mini UAV Concepts

- CAP is taking a multi-tiered system approach
  - Higher end imagery collection systems
  - COTS products like DJI 3 & 4s
  - Small fixed wing systems
- Operate under FAA Part 107 Rules Primarily
- Will review options of waivers for night and BLOS once we have more experience
- Expect to release a regulation for top level program management for review in September with implementation by the end of 2017



# Mini-UAV Operating Locations

- 9 Units/Wings Currently
- Expanding to another 15 this fall/winter
- Goal is for every wing by 2020 if not sooner





# Hexacopters

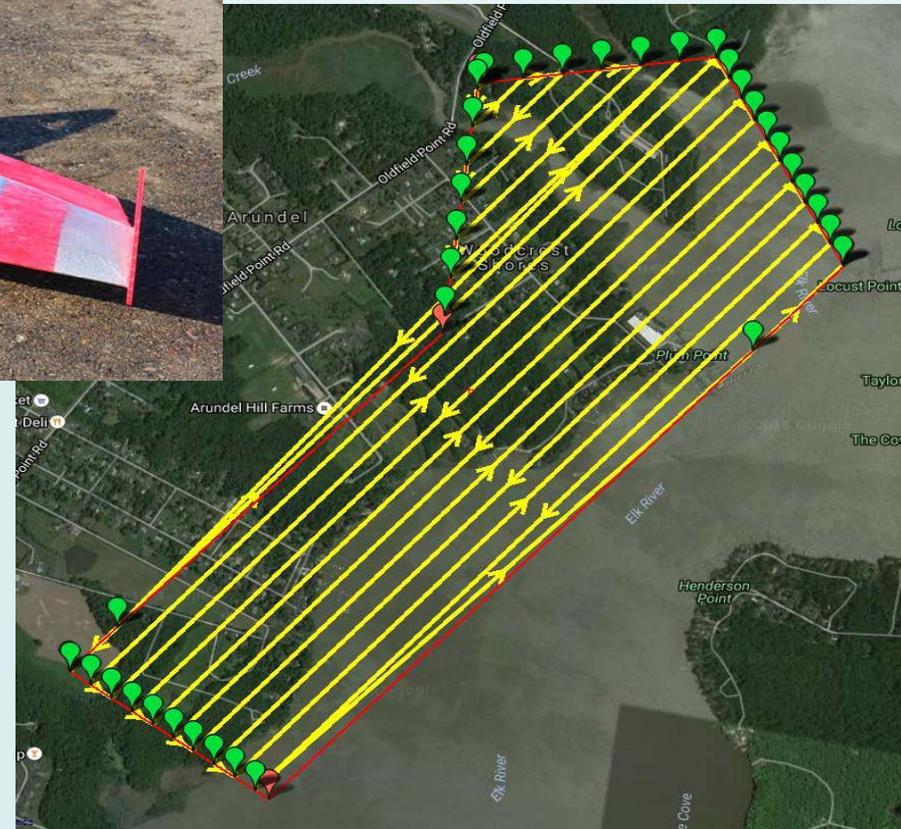


12 Minutes = .25 Square Kilometers



# Fixed Wing Test

60 Minutes = 2.5 Square Kilometers





# Future Fixed Wing Options

- An RFI was accomplished this spring to explore fixed wing options further
- Several candidates will likely be flown this fall
- The industry is changing rapidly...expect more options to come available



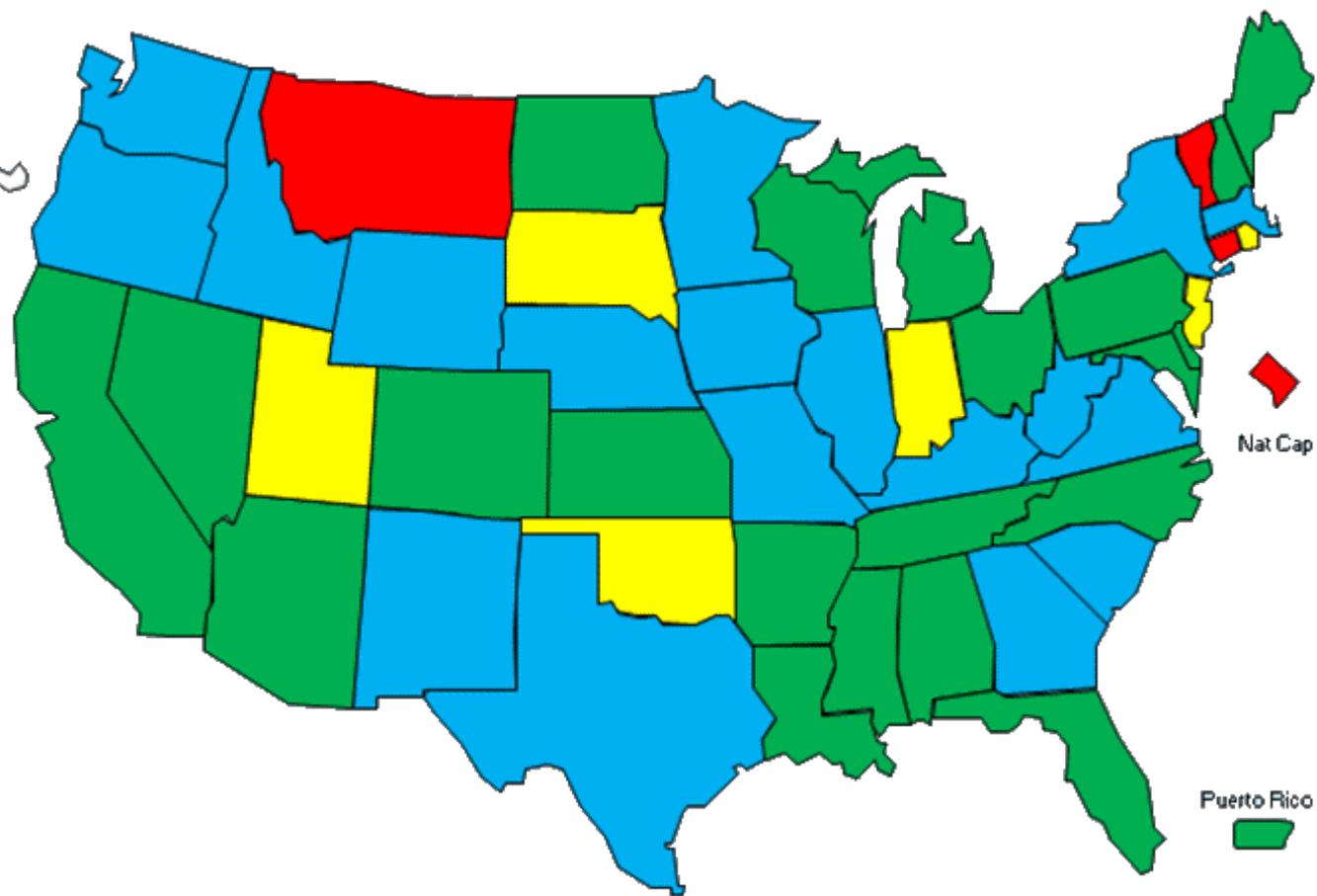


# National Traffic Net Sustained Performance

## FY14



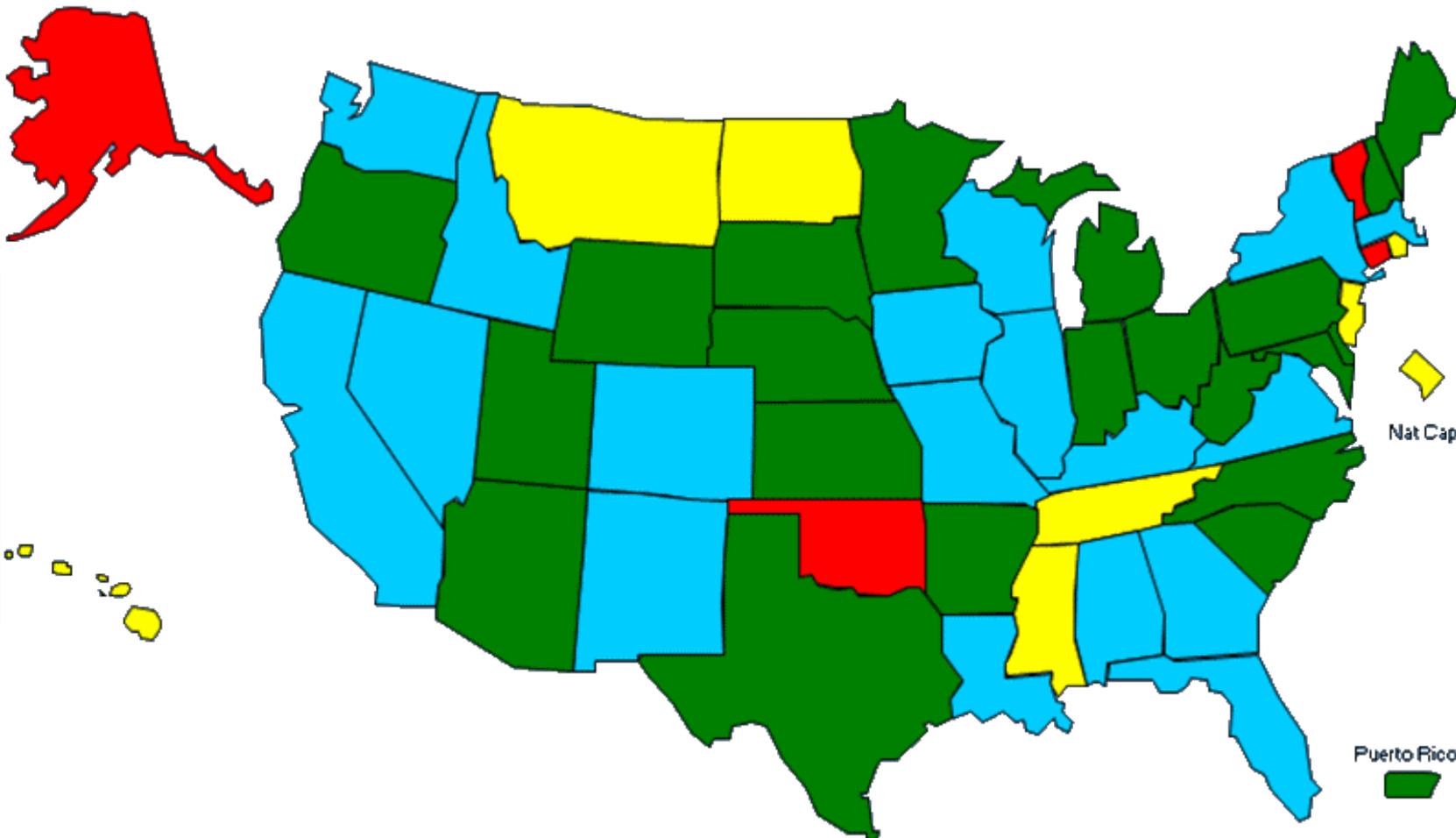
%	Color
0	
10	Red
20	Red
30	Red
40	Yellow
50	Yellow
60	Yellow
70	Green
80	Green
90	Green
100	Blue





# National Traffic Net Sustained Performance

## FY15



%	Color
0	
10	Red
20	Red
30	Yellow
40	Yellow
50	Yellow
60	Green
70	Green
80	Green
90	Green
100	Blue

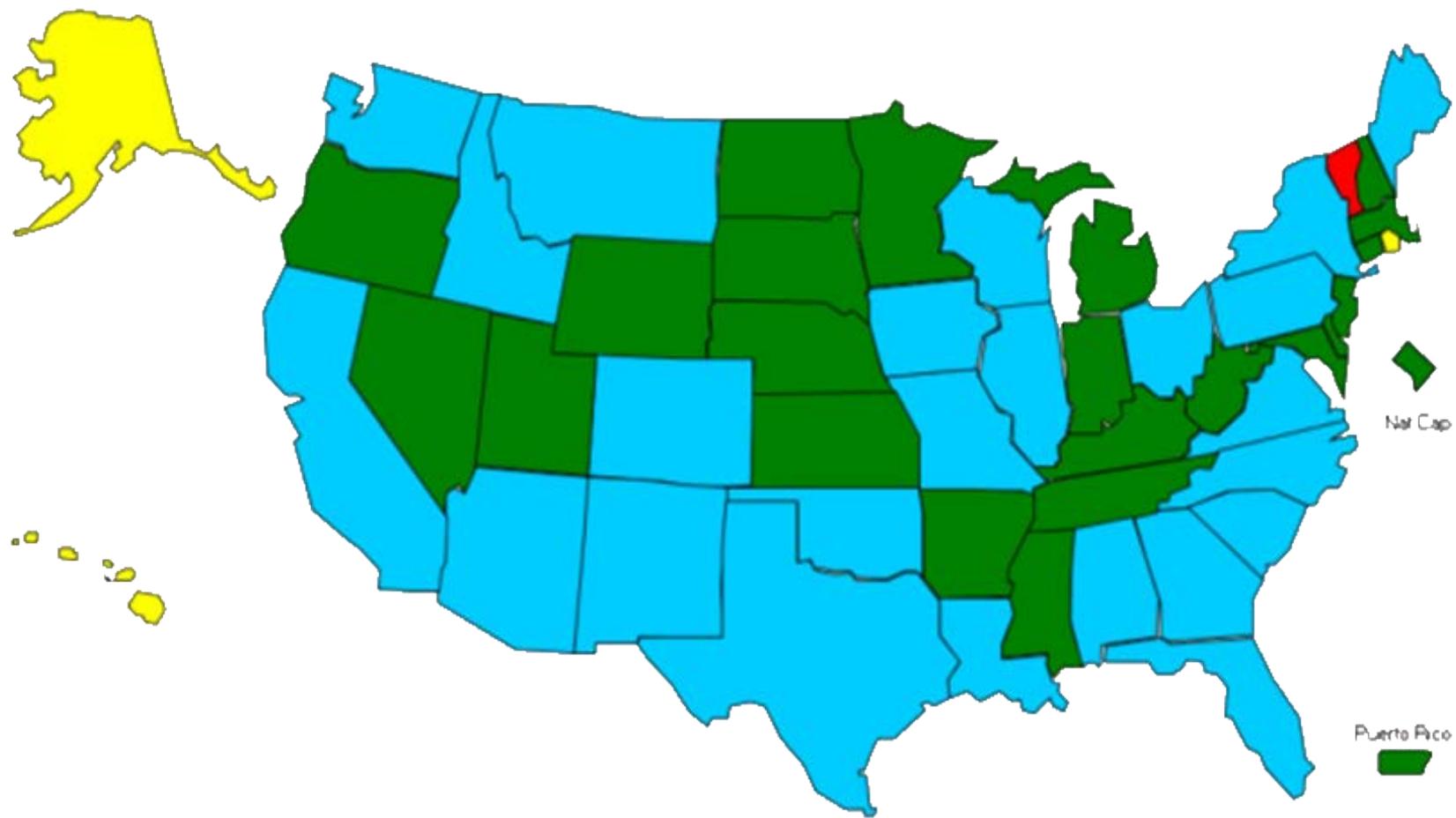
Nat Cap

Puerto Rico



# National Traffic Net Sustained Performance

## FY16



%	Color
0	
10	Red
20	Red
30	Red
40	Yellow
50	Yellow
60	Yellow
70	Dark Green
80	Dark Green
90	Dark Green
100	Light Blue

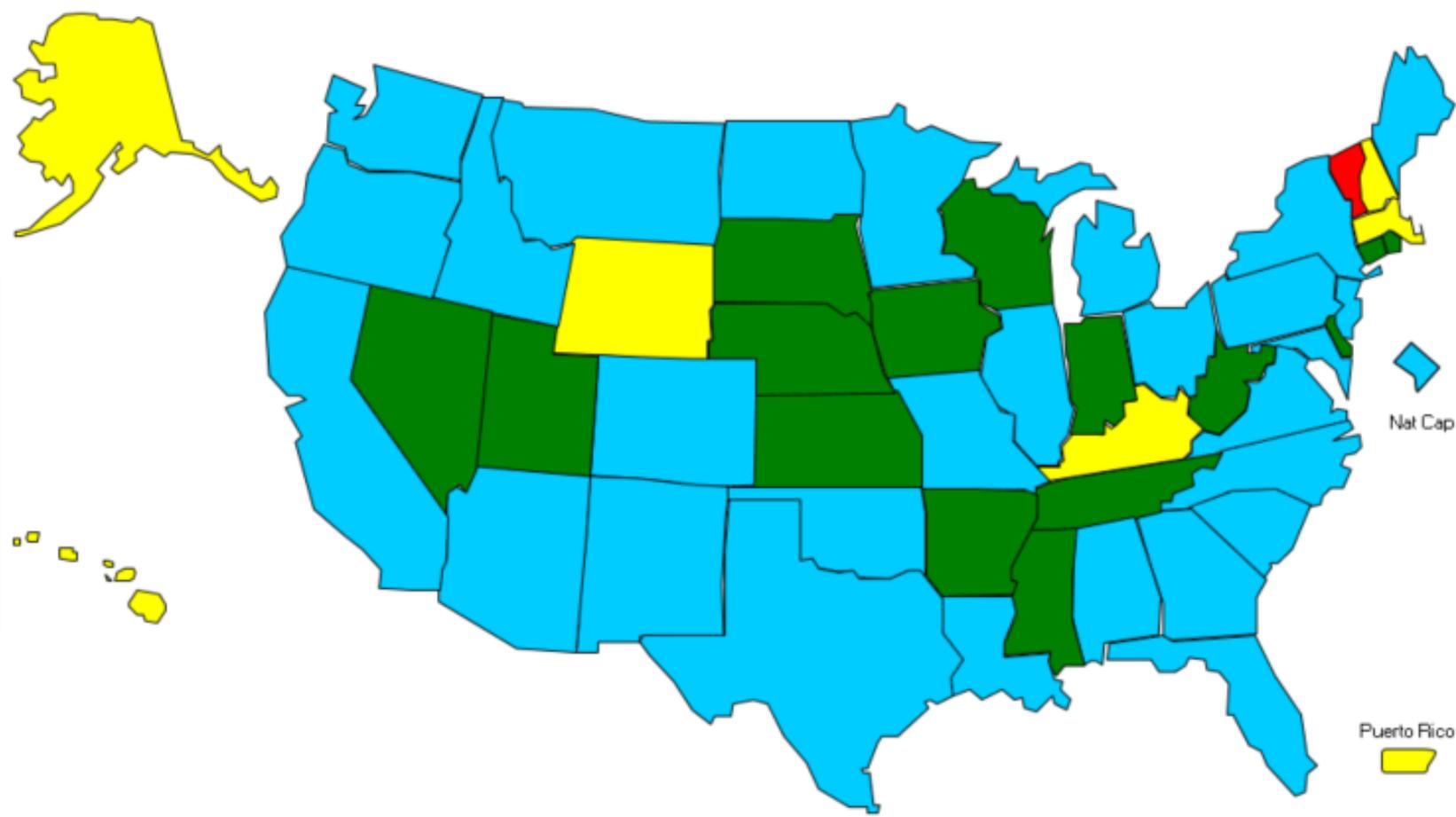
Net Cap

Puerto Rico



# National Traffic Net Sustained Performance

FY17



%	Color
0	
10	Red
20	Red
30	Red
40	Yellow
50	Yellow
60	Yellow
70	Dark Green
80	Dark Green
90	Dark Green
100	Light Blue

Nat Cap

Puerto Rico





# CAP/DO Top Projects

- CAPR 70-1 (Formerly 60-1)
- FRO & ORM Updates
- CAPR 73-1 (Formerly 173-3) & FY18 Rate Changes
- Annual Training Plans
- SQTR Updates
- HF Radio System Updates
- HF Data & Cyber Denied Ops
- Remote Repeater Access
- CAPR 75-1 (Formerly 60-5)
- Health Services Track Updates
- Website Updates
- Hire a new CAP/DOV
- RPA Escort Mission Expansion
- CAPR 72-1 (Formerly 60-3, 60-6 & 900-5)
- CAPR 70-2 (Formerly 60-2)
- CD / DI Course Updates
- Operational Mini-UAV Program Implementation & Roadmap
- Pilot Shortage Programs
- Aircrew Professionalism CFT
- Glider Operations CFT
- Flight Training Standards CFT
- Sensor Program Roadmap
- COOP Program Updates

# QUESTION / SUGGGESTION CARD

Use this card to provide a question to be answered during the Q & A period or to provide a suggestion to the pre-conference staff in order to make this event better in the future. Please write legibly, and remember that questions will be considered publicly, so be polite and appropriate.



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Name: \_\_\_\_\_

Rank: \_\_\_\_\_ Wing: \_\_\_\_\_

E-mail: \_\_\_\_\_



**QUESTIONS?**