Civil Air Patrol

Operations Pre-Conference Update

John “Moose” Desmarais

7 August 2019

Baltimore, Maryland



Thank you for your continued support!

Current Rates

- Powered Table 1 – Minor Maintenance Only – Internal

Manufacturer	Cessna	Cessna	Cessna	Cessna	Gippsland	Maule
Model	172	182	A185F	206	GA-8	MT-7-235
Cost/hour	$56	$62	$110	$87	$83	$58

- Powered Table 2 – Minor & Major Maintenance – External to CAP including USAF

Manufacturer	Cessna	Cessna	Cessna	Cessna	Cessna	Gippsland	Maule
Model	172	182	SP 182Q	A185F	206	GA-8	MT-7-235
Cost/hour	$72	$92	$168	$181	$91	$85	$72

- Gliders: $10 per launch internal and $12 external
- Balloons: $38 per hot hour internal and $48 external
- sUAS: $25 per operating hour when supporting missions no funded with CAP's annual Congressional appropriation, when members are funding training personally, or when customers are providing equipment for CAP to operate

FY20 Rates

- Powered Table 1 – Minor Maintenance Only – Internal

Manufacturer	Cessna	Cessna	Cessna	Cessna	Gippsland	Maule
Model	172	182	A185F	206	GA-8	MT-7-235
Cost/hour	$62	$70	$110	$103	$98	$64

- Powered Table 2 – Minor & Major Maintenance – External to CAP including USAF

Manufacturer	Cessna	Cessna	Cessna	Cessna	Cessna	Cessna	Gippsland	Maule
Model	172	182	SP 182Q	A185F	206	SP 206	GA-8	MT-7-235
Cost/hour	$74	$96	$188	$188	$139	$211	$128	$74

- Uses an overall inflation factor of 4% applied to true costs of FY18
- 206 Rate and GA8 was adjusted to factor out Alaska Wing as was done for FY19 as it skews the rest of the US considerably
- Maximum of Conklin & deDecker applied to A185F rate; true cost was 195% higher, ~$556/hr
- No change to Glider, Balloon and sUAS rates

WMIRS e108 Process Summary
Current as of 1 August 2019

FY18 (1 OCT 17 – 1 AUG 18)

- 4,001 e108s processed
- 14 days until e108s created; Range 0 to 82 days
- 3 days until Wing approves; Range 0 to 46 days
- 10 days until National approves; Range 3 to 95 days
- 27 days total; Range 5 to 103 days

FY19 (1 OCT 18 – 1 AUG 19)

- 3,519 e108s processed
- 15 days until e108s created; Range 1 to 34 days
- 5 days until Wing approves; Range 0 to 46 days
- 6 days until National approves; Range 3 to 19 days
- 26 days total; Range 7 to 74 days

CAP Mission Flying Continues to Change

Flying Comparison as of 1 August 2019

Mission Types	FY16	FY17	FY18	1 AUG18	1AUG19	Difference
AFROTC	148	492	547	508	1,194	135%
AFJROTC	443	734	978	786	2,006	155%
Air Defense	1,390	1,453	1,636	1,063	1,209	14%
Cadet Orientation	10,825	10,769	14,101	9,433	9,573	2%
Drug Interdiction	9,697	6,174	3,540	2,931	2,963	1%
DSCA/DR	1,130	4,070	1,346	907	2,379	162%
Maintenance	8,972	8,976	7,994	6,781	6,916	2%
Other / HLS	6,221	7,298	5,496	6,674	12,407	86%
Range Support	336	343	380	335	393	17%
Route Survey	700	620	681	355	352	-1%
Search & Rescue	1,741	1,812	1,640	1,366	858	-37%
Surrogate RPA	1,168	1,234	1,302	1,078	986	-9%
Training	37,651	30,977	24,508	20,296	22,802	12%
AFAM Total	**80,418**	**74,951**	**64,149**	**52,511**	**64,036**	**22%**
Liaison	**2,463**	**1,890**	**1,459**	**1,477**	**1,022**	**-31%**
Corporate	**22,033**	**23,516**	**24,165**	**19,212**	**14,168**	**-26%**
Total Flying	**104,914**	**100,357**	**89,773**	**73,200**	**78,243**	**7%**

Expanding Your Missions

CAP's Missions are Changing

Type	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
AFROTC	3,203	1,799	0	0	0	40	148	492	547
AFJROTC	1,375	1,121	0	126	0	324	443	734	978
Air Defense	1,903	2,583	2,017	1,258	1,289	1,164	1,391	1,453	1,636
COF	13,737	12,744	16,320	15,964	14,735	10,885	10,827	10,770	14,101
CD/DI	10,735	8,412	8,358	7,015	7,183	9,186	9,697	6,174	3,540
DSCA/DR	3,018	2,266	331	2,200	644	297	1,130	4,074	1,346
HLS / Other	4,397	4,205	3,759	3,060	3,088	5,369	6,224	7,295	5,496
Maintenance	9,031	7,713	8,067	7,498	7,565	8,080	8,972	8,974	7,994
Range Support	463	583	447	348	165	428	338	343	380
Route Survey	757	862	904	678	797	836	700	620	681
SAR	2,505	2,084	2,858	2,298	1,936	1,828	1,745	1,812	1,640
Surrogate RPA	870	1,087	616	1,114	1,224	996	1,173	1,234	1,302
Training	28,316	30,397	32,692	28,281	30,447	36,639	37,673	30,977	24,508
AFAM	**80,310**	**75,856**	**76,369**	**69,804**	**69,073**	**76,070**	**80,459**	**74,950**	**64,149**
Liaison	**2,638**	**2,423**	**2,012**	**1,804**	**1,717**	**1,932**	**2,195**	**1,888**	**1,459**
Corporate	**29,780**	**24,286**	**22,085**	**23,494**	**20,307**	**19,426**	**21,518**	**23,515**	**24,165**
Grand Total	**112,728**	**102,565**	**100,466**	**95,138**	**91,097**	**97,428**	**104,172**	**100,353**	**89,773**

Expanding Your Missions

CAP's Missions are Changing

- CAP can fly more we have proven it is not a factor of the number of aircraft
- FY10 – 530 aircraft
- FY99 – we flew 119,174 hours on 500 CAP aircraft, and 3,227 on member aircraft – 122,401 hours – our highest flying year on corporate aircraft

Mission Type	FY10	FY18	% Difference
AFROTC	3,203	547	-83%
AFJROTC	1,375	978	-29%
Air Defense	1,903	1,636	-14%
Cadet Orientation Flights	13,737	14,101	3%
Drug Interdiction	10,735	3,540	-67%
DSCA / DR	3,018	1,346	-55%
HLS / Other	1,413	5,496	289%
Maintenance	9,031	7,994	-11%
Range Support	463	380	-18%
[illegible] Survey	757	681	-10%
SAR	2,505	1,640	-35%
Surrogate [illegible]	281	1,302	363%
Training	31,889	24,508	-23%
Overall AFAM Total	**80,310**	**64,149**	**-20%**
Liaison Flying	**2,638**	**1,459**	**-45%**
Corporate Flying	**29,780**	**24,165**	**-19%**
Grand Total Flying	**112,728**	**89,773**	**-20%**

FY18 Utilization Rates

1 October through 30 September CAPF 18 Reports

How much did your Wing fly per month last year?

Flew 17.3 to 25.4 hours per month per aircraft

Flew 15.2 to 16.4 hours per month per aircraft

Flew 13.4 to 14.8 hours per month per aircraft

Flew 11.8 to 13.0 hours per month per aircraft

Flew 1.5 to 11.5 hours per month per aircraft

Rank	Wing	Rate
1	NC	304.2
2	DC	266.9
3	CT	242.0
4	NER	232.8
5	CA	225.9
6	AZ	223.7
7	NH	220.5
8	MD	215.2
9	SC	212.6
10	VT	211.9
11	DE	211.3
12	RMR	207.8
13	OH	196.5
14	WV	195.2
15	TX	194.1
16	FL	193.7
17	WI	192.4

Rank	Wing	Rate
18	MN	190.9
19	MA	186.6
20	PR	182.4
21	GA	178.0
22	CO	175.8
23	NM	175.7
24	AL	168.6
25	SWR	167.5
26	LA	166.9
27	VA	165.2
28	TN	165.0
29	NJ	162.0
30	OK	161.1
31	OR	155.8
32	MI	154.7
33	SD	152.1
34	MS	148.5

Rank	Wing	Rate
35	NY	146.0
36	IL	142.9
37	SER	142.0
38	KS	137.8
39	AR	137.1
40	NV	136.1
41	WA	130.1
42	IN	129.6
43	ND	128.7
44	ID	127.3
45	UT	122.1
46	PA	121.9
47	MO	111.0
48	ME	110.5
49	RI	103.1
50	MER	102.1
51	NE	101.3

Rank	Wing	Rate
52	AK	97.2
53	HI	91.4
54	KY	79.8
55	CNG	76.7
56	WY	73.7
57	IA	72.6
58	MT	70.1
59	NCR	18.0

Goal: 200 Hours Per Aircraft

Results: 167.0 Hours Per Aircraft

FY19 Powered Aircraft Utilization Rates

1 October through 30 June CAPF 18 Reports as of 1 August 2019

How do we reach 200 hours average across the fleet this FY?

Fly 15.8 hours per month per aircraft for the last quarter

Fly 21.8 hours per month per aircraft for the last quarter

Fly 26.8 hours per month per aircraft for the last quarter

Fly 31.8 hours per month per aircraft for the last quarter

Fly 66.7 hours per month per aircraft for the last quarter

Rank	Wing	Rate
1	AZ	211.5
2	NC	210.9
3	PR	193.3
4	NH	176.3
5	CA	172.3
6	AR	166.2
7	FL	165.9
8	NM	164.5
9	DC	162.6
10	GA	161.6
11	WV	150.6
12	AL	142.9
13	TN	137.9
14	TX	137.2
15	NER	132.3
16	CO	126.1
17	MA	125.3
18	LA	124.9
19	UT	123.7
20	MS	123.7
21	DE	123.0
22	NV	121.6
23	NJ	120.2
24	VA	118.3
25	SD	116.9
26	OK	115.7
27	VT	115.2
28	MD	114.9
29	MI	114.7
30	KS	113.6
31	SC	113.6
32	PA	112.4
33	WI	112.2
34	WA	106.4
35	CT	106.0
36	OH	104.7
37	MN	102.8
38	RMR	101.2
39	IL	94.6
40	NE	87.6
41	IN	85.6
42	ID	84.5
43	OR	83.8
44	HI	83.8
45	AK	83.7
46	NY	82.4
47	MO	82.1
48	ND	80.0
49	SER	77.8
50	RI	71.1
51	ME	65.2
52	KY	62.7
53	IA	57.4
54	CNG	56.5
55	MT	48.5
56	NCR	48.0
57	WY	47.2
58	SWR	30.3
59	MER	14.2

Goal: 149.6 Hours Per Aircraft

Results: 122.6 Hours Per Aircraft

When does CAP fly?



ONE CIVIL AIR PATROL, EXCELLING IN SERVICE TO OUR NATION AND OUR MEMBERS!

We can fly more!

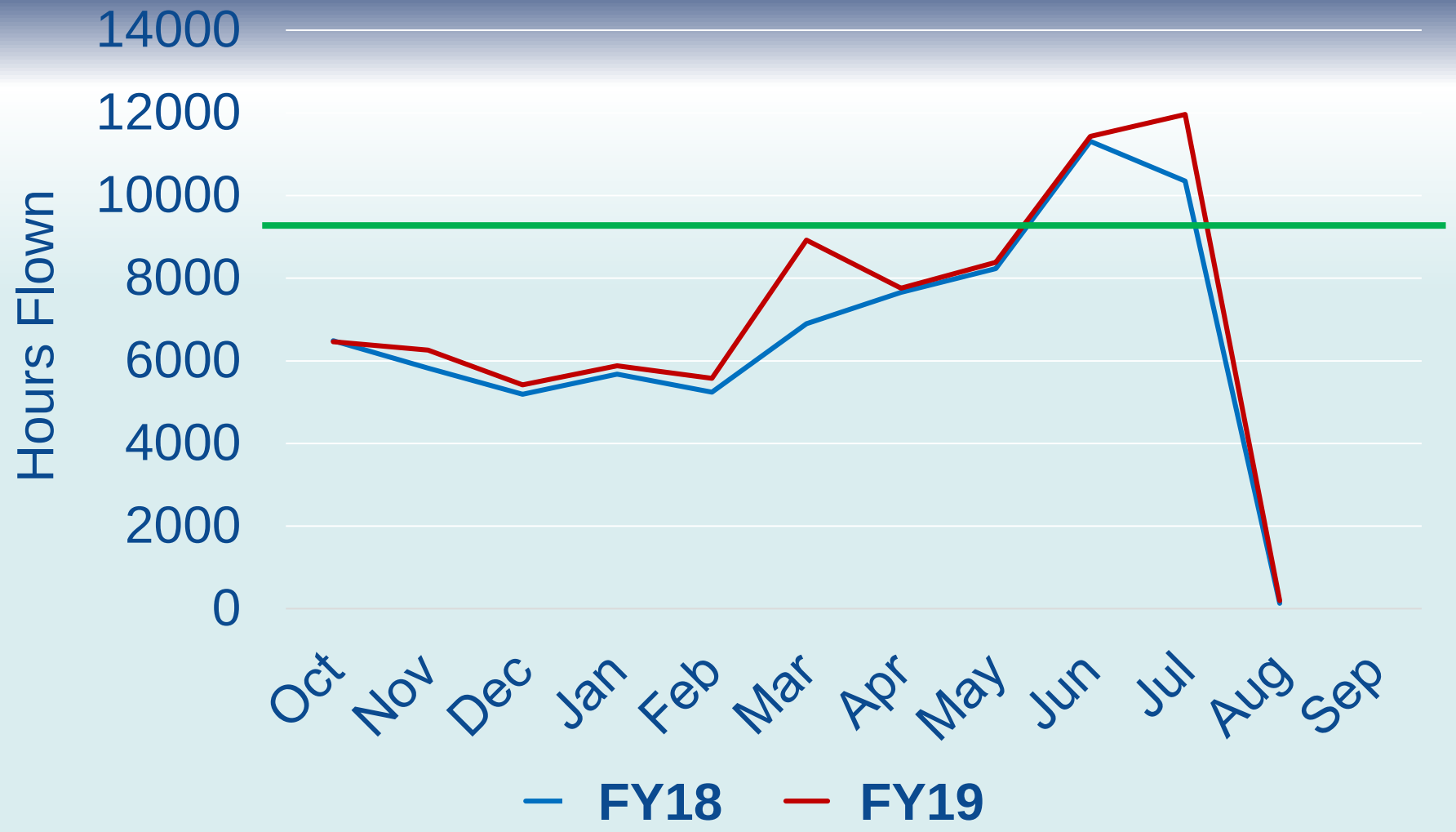


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Work to Fly when Aircraft are more Available



Month by Month Comparison
FY18 vs FY19 as of 1 August



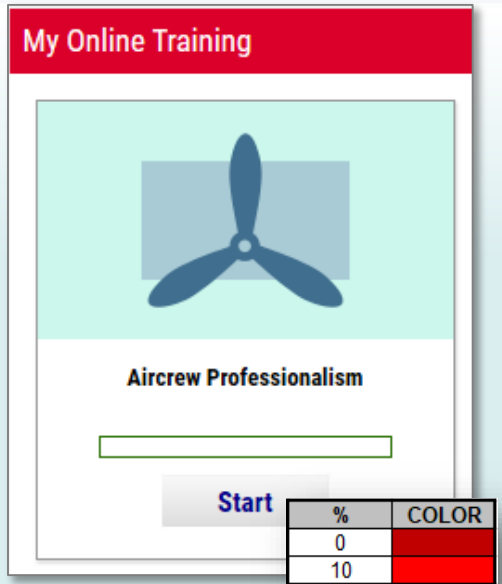
- CAP had flown 73,009 hours as of 1 August in FY18
- In FY19, CAP has flown 77,969 hours as of 1 August, a 7% increase over FY18
- Great improvement, but 16% short of the overall goal of 93,282 hours for this date

Nationwide Aircrew Capability

Crew Type	Desired Total	Total Assigned (No duplication from any other category)	Average Time Flown Last 12 Months	Full Time (Those that flew equal or more than the average)	Part Time (Those that flew less than the average in the last 12 months)	Average Years of Service (Average time of membership of personnel in this category)
Mission Check Pilot Examiners	280	322 (⇩7)	71.0 (⇧3.3)	130 (⇩1)	192 (⇩6)	21 (NC)
Mission Check Pilots	560	146 (⇩18)	84.3 (⇧2.2)	59 (⇩5)	87 (⇩13)	16 (⇧1)
Mission Pilots	1,680	1,051 (⇩95)	62.4 (⇧1.6)	428 (⇩18)	623 (⇩77)	12 (NC)
Mission Pilot Trainees	560	895 (⇧47)	21.2 (⇧.1)	321 (⇧38)	612 (⇧9)	15 (⇧2)
Transport Mission Pilots	280	556 (⇩9)	24.8 (⇩1.2)	202 (⇩9)	354 (NC)	9 (NC)
VFR Pilots	280	129 (⇧16)	18.3 (⇧.3)	46 (⇩1)	99 (⇧17)	5 (⇩1)
Mission Observers	2,240	1,975 (⇩237)	10.0 (⇧.1)	602 (⇩70)	1,373 (⇩167)	12 (NC)
Mission Observer Trainees	1,120	1,346 (⇧41)	3.0 (⇩.4)	357 (⇧21)	969 (⇧20)	13 (⇧1)
Mission Scanners	2,240	1,445 (⇩5)	3.7 (⇧.1)	423 (⇩43)	1022 (⇧38)	8 (NC)
Mission Scanner Trainees	1,120	1,631 (⇩108)	1.4 (NC)	387 (⇩39	1,244 (⇩69)	10 (⇧1)
Total	**10,360**	**9,559 (⇩375)**	**30.0 (⇧.6)**	**2,955 (⇩127)**	**6,604 (⇩248)**	**12.3 (⇧.4)**

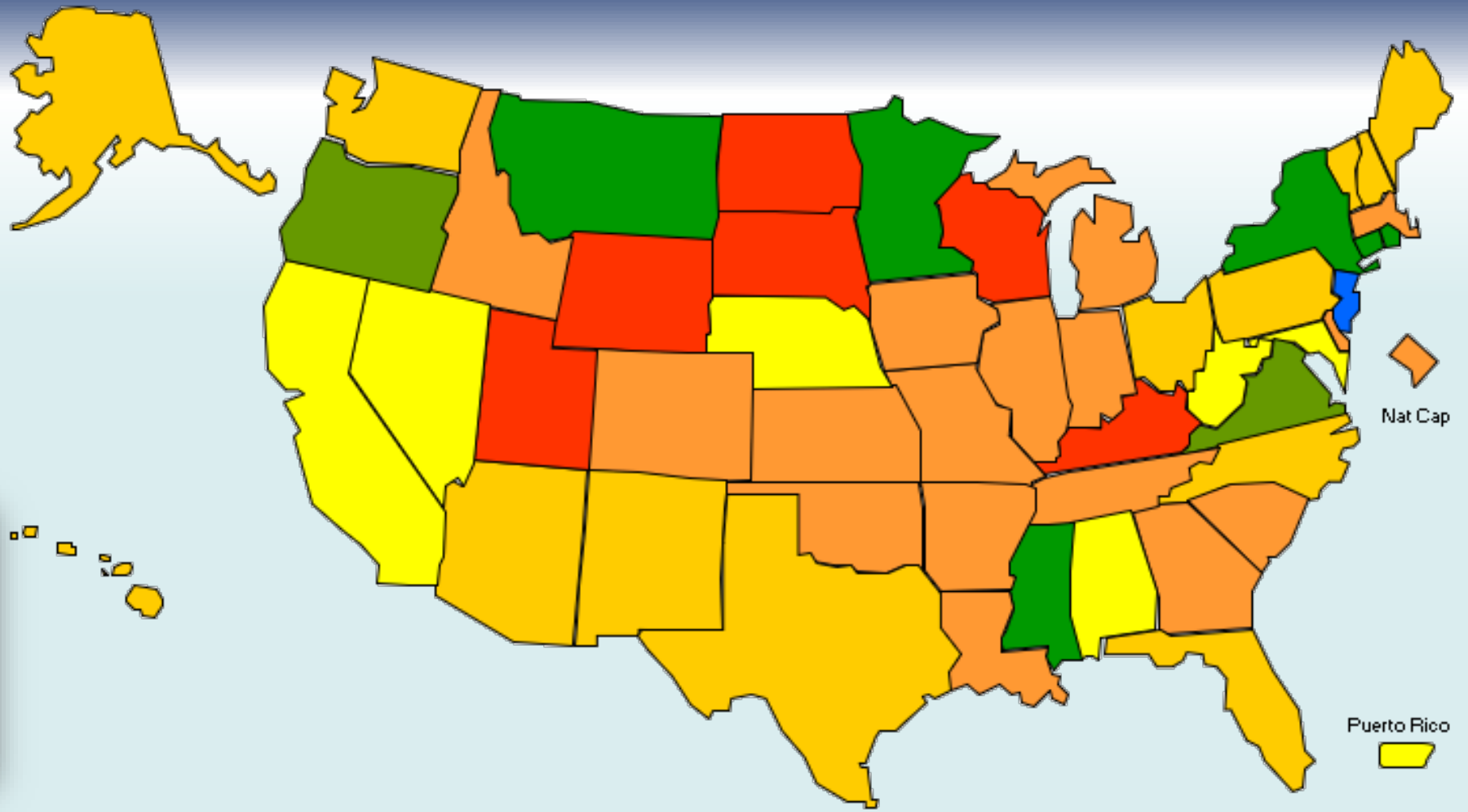
Aircrew Professionalism Commitment

As of 26 July 2019



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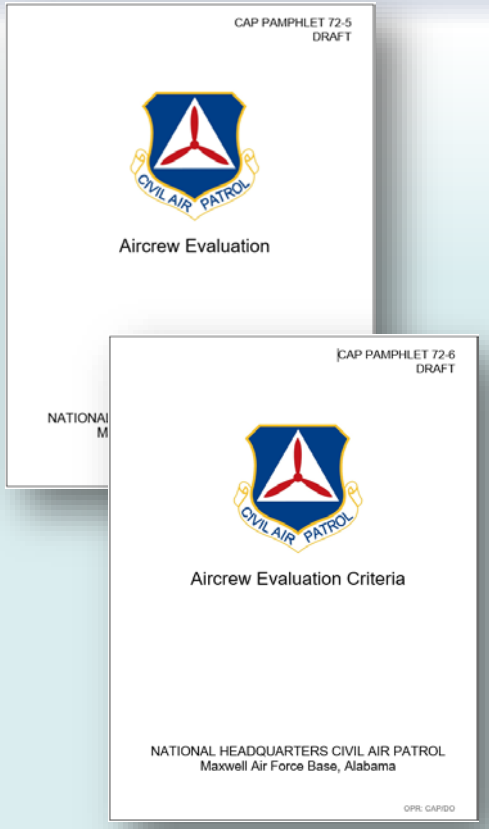
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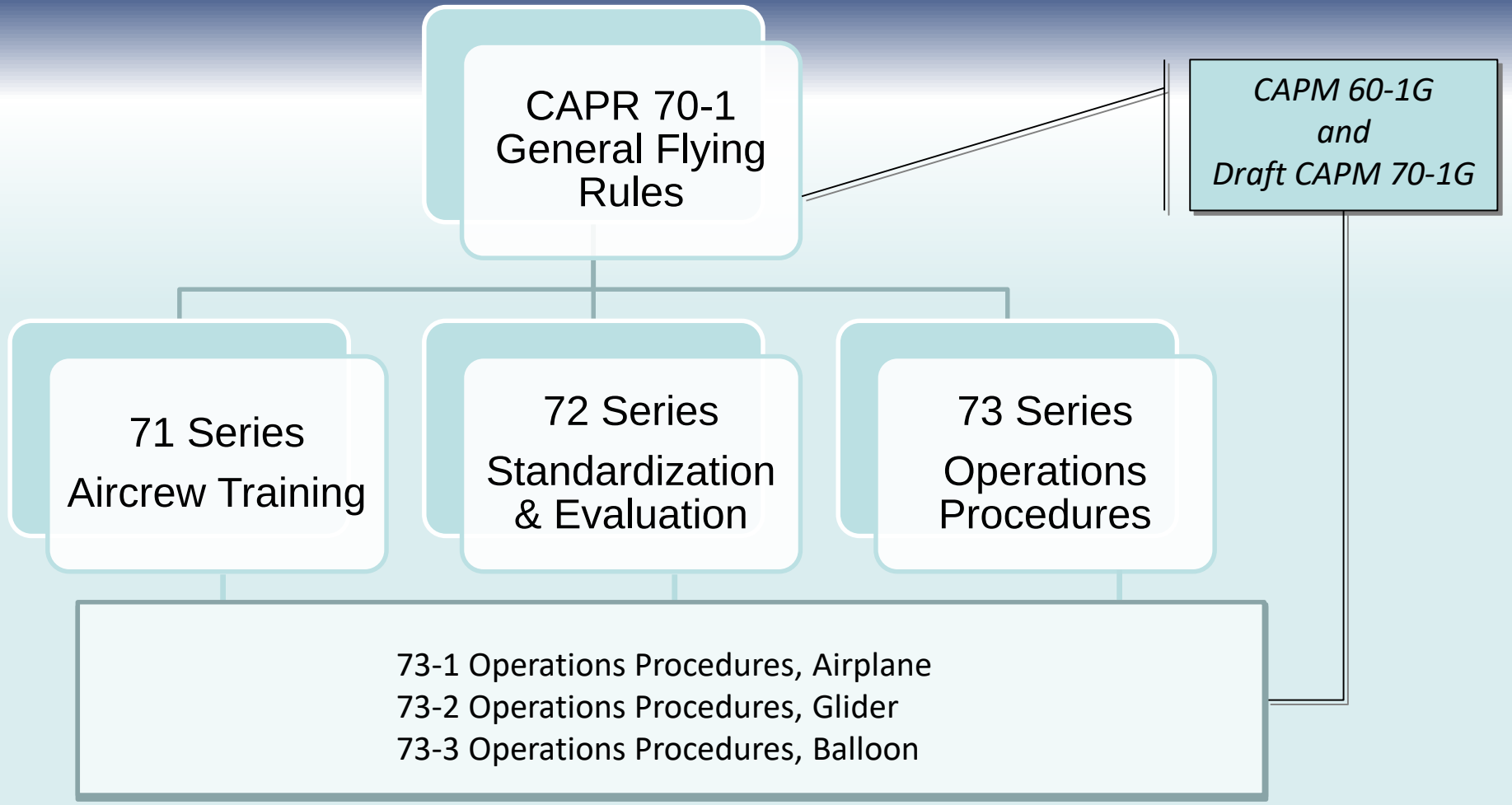
Pilot Flight Evaluation Process Improvement

- CP qualification, endorsement & currency requirements
- Process Standards
- Evaluation Standards
  - Endorsements
  - CAP-unique tasks
  - QT rating
- CP/IP evaluation tasks
- Currency surveys
- Training via LMS

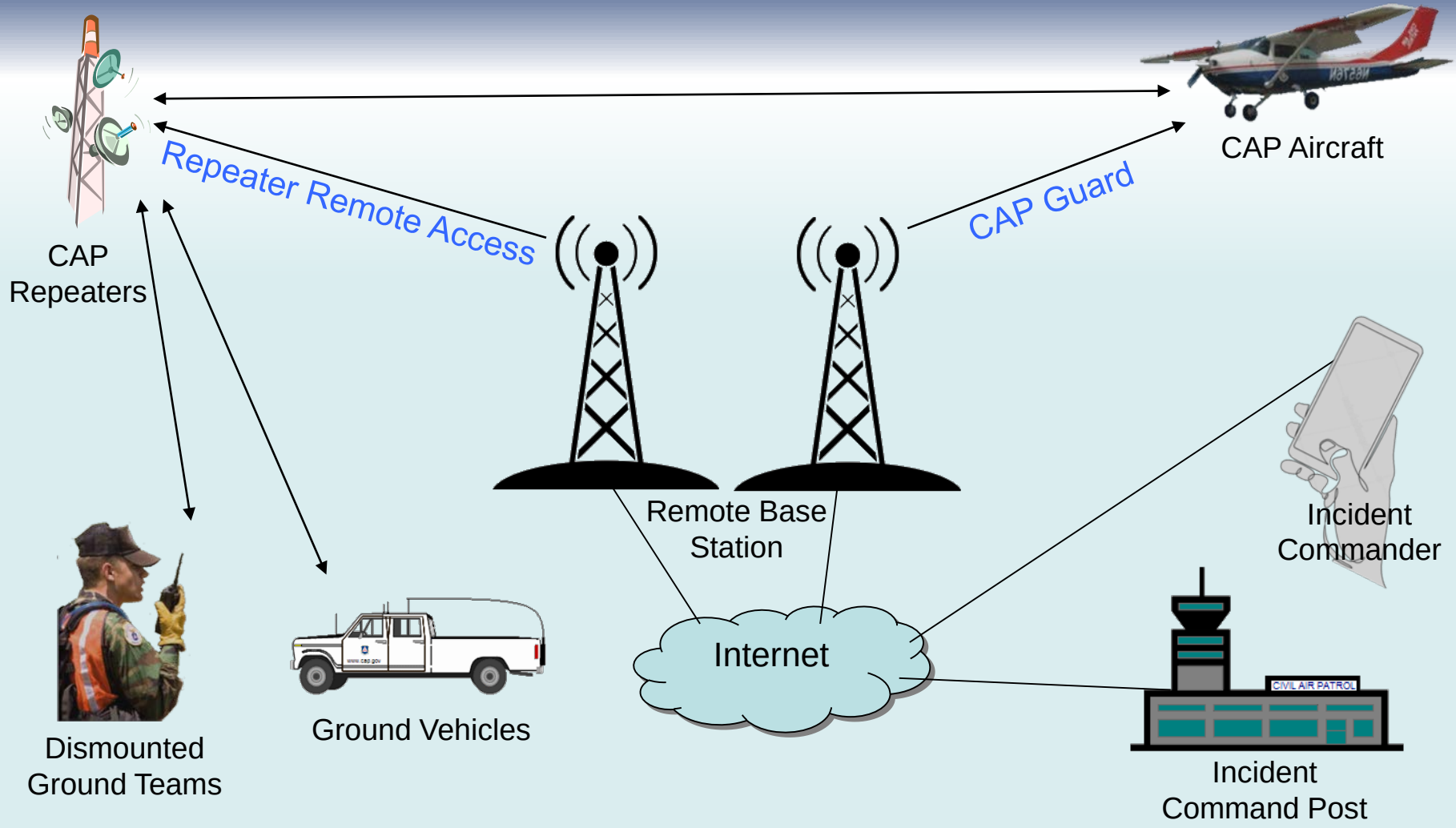




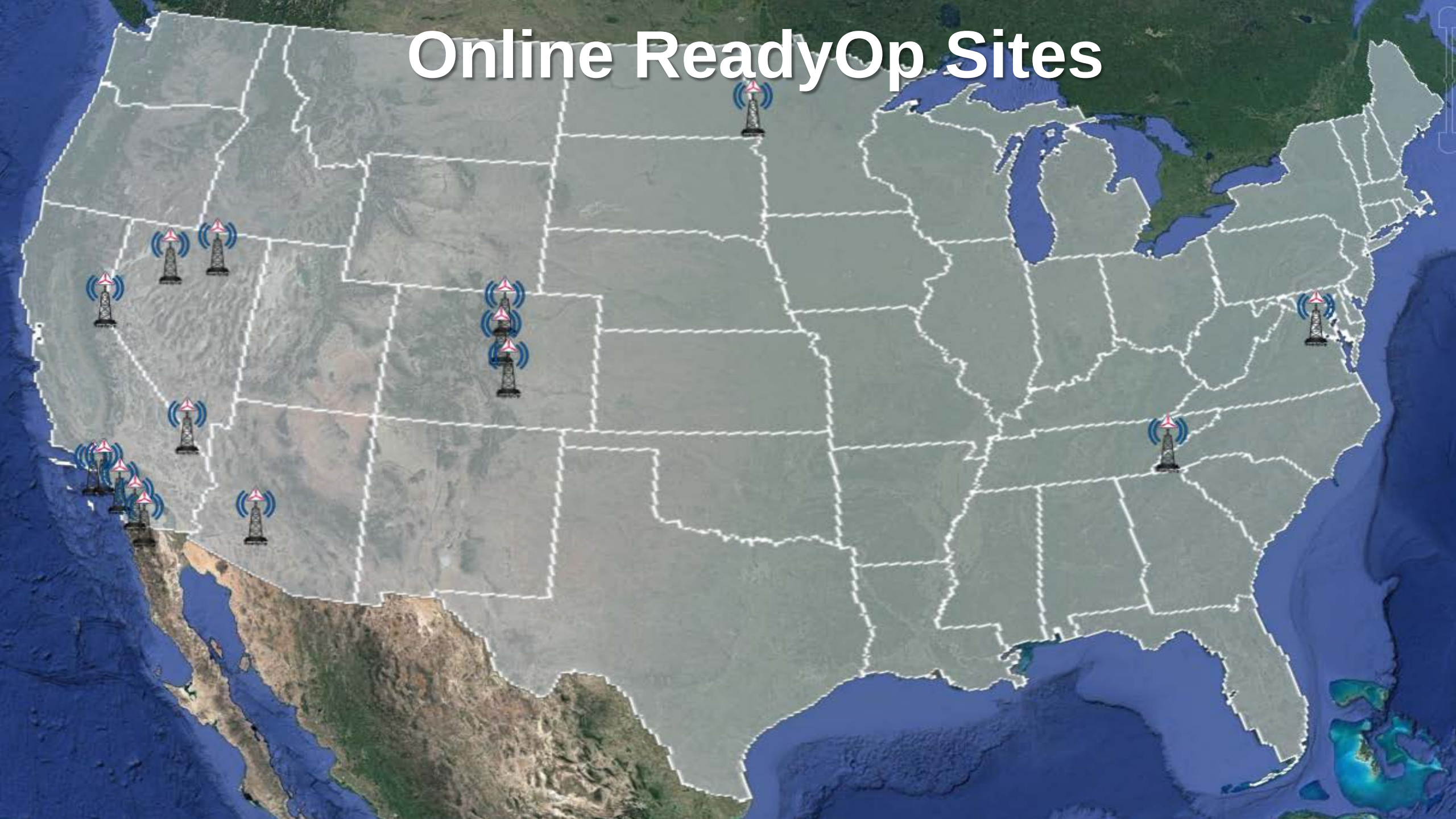
Aircraft Operations: Knowledge Management



ReadyOp Remote Base Options



Online ReadyOp Sites



ReadyOp Internet Remote Base Stations

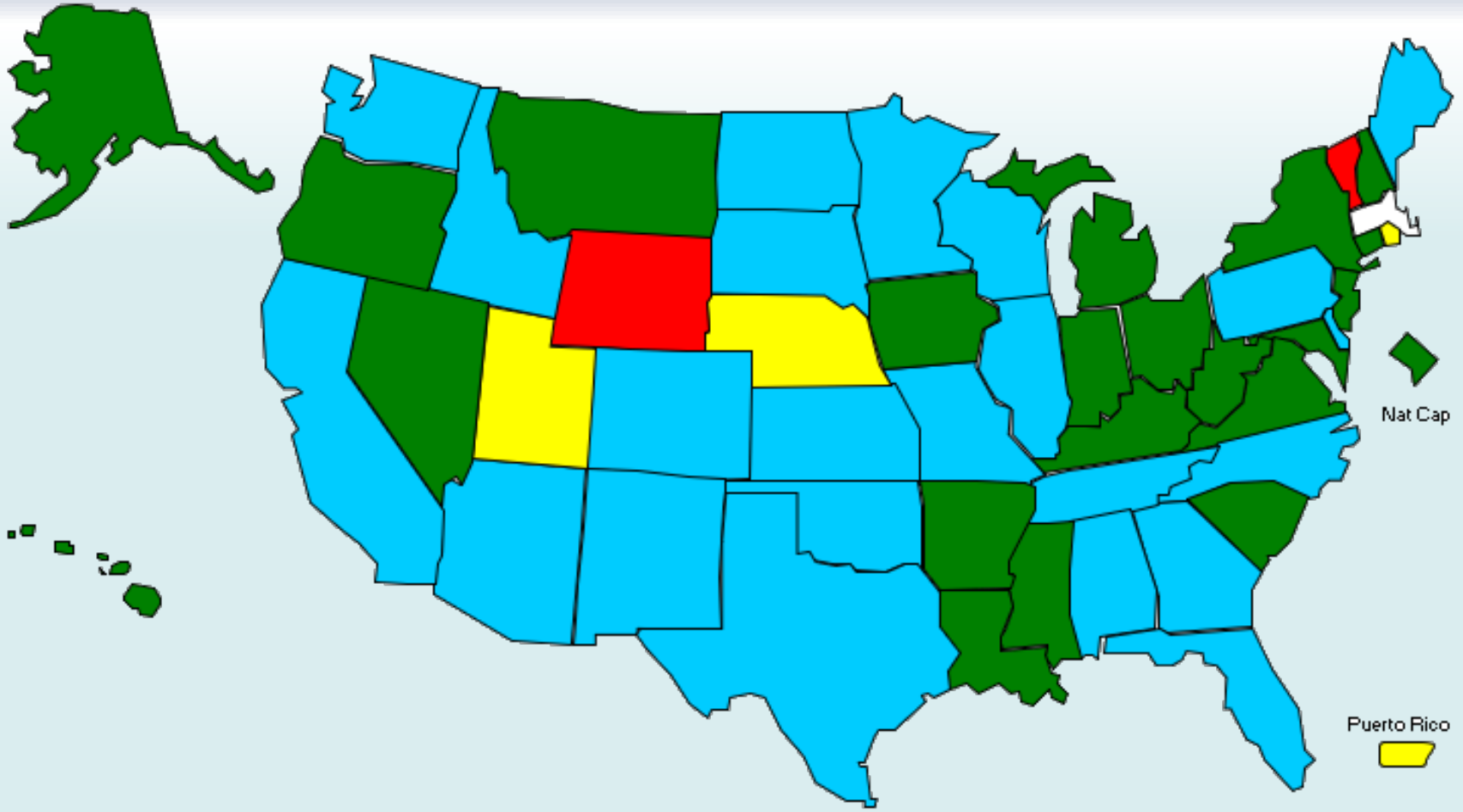
- **Priority 1 stations are ready to ship from the NTC to support FEMA Region HQs, National Capital Region and critical response areas**
- **Long Range (next 3 to 5 years)**
  - **Every CAP repeater connected**
  - **At least two tactical ReadyOp stations in each wing**
- **Wings should be looking for host locations**
  - **Need auto-start, auto-switch emergency power**
  - **Need internet restoral priority**
  - **Look for: Government buildings, hospitals, telecommunications facilities**
  - **Avoid: Member's homes**



National Traffic Net Sustained Performance

20 July 2018 to 18 July 2019

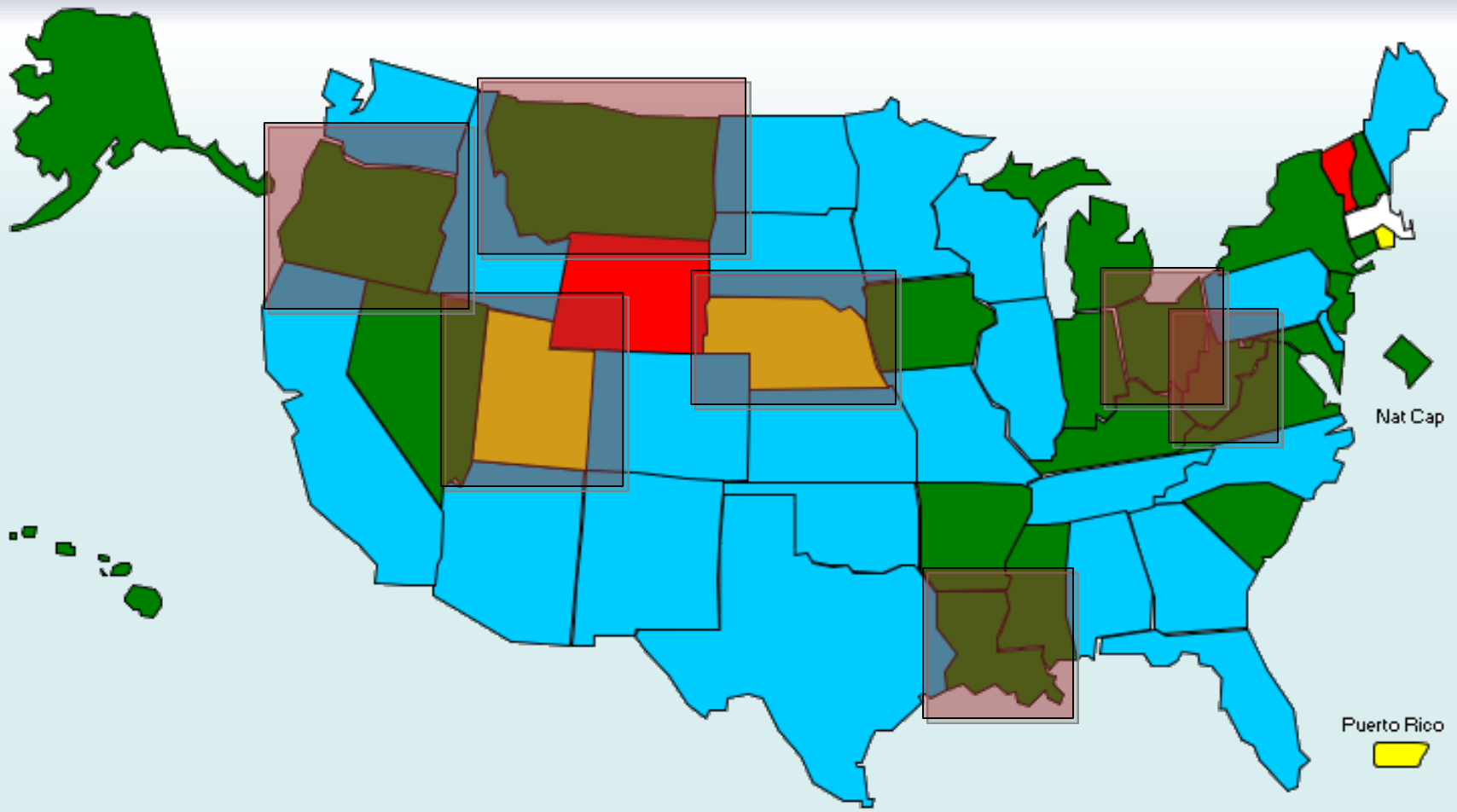
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National Traffic Net Sustained Performance Areas of Concern

20 July 2018 to 18 July 2019

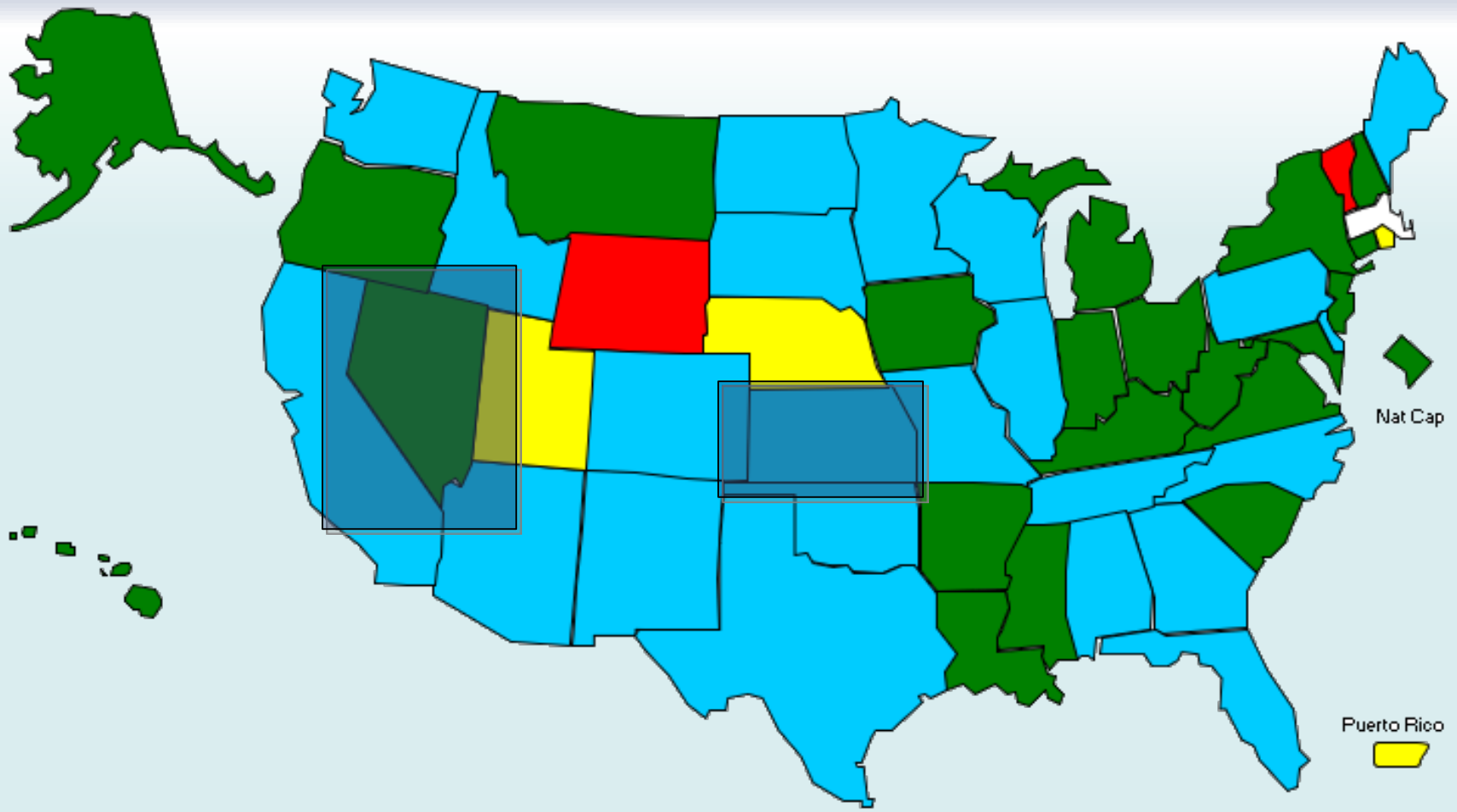
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National Traffic Net Sustained Performance Overall Improvement

20 July 2018 to 18 July 2019

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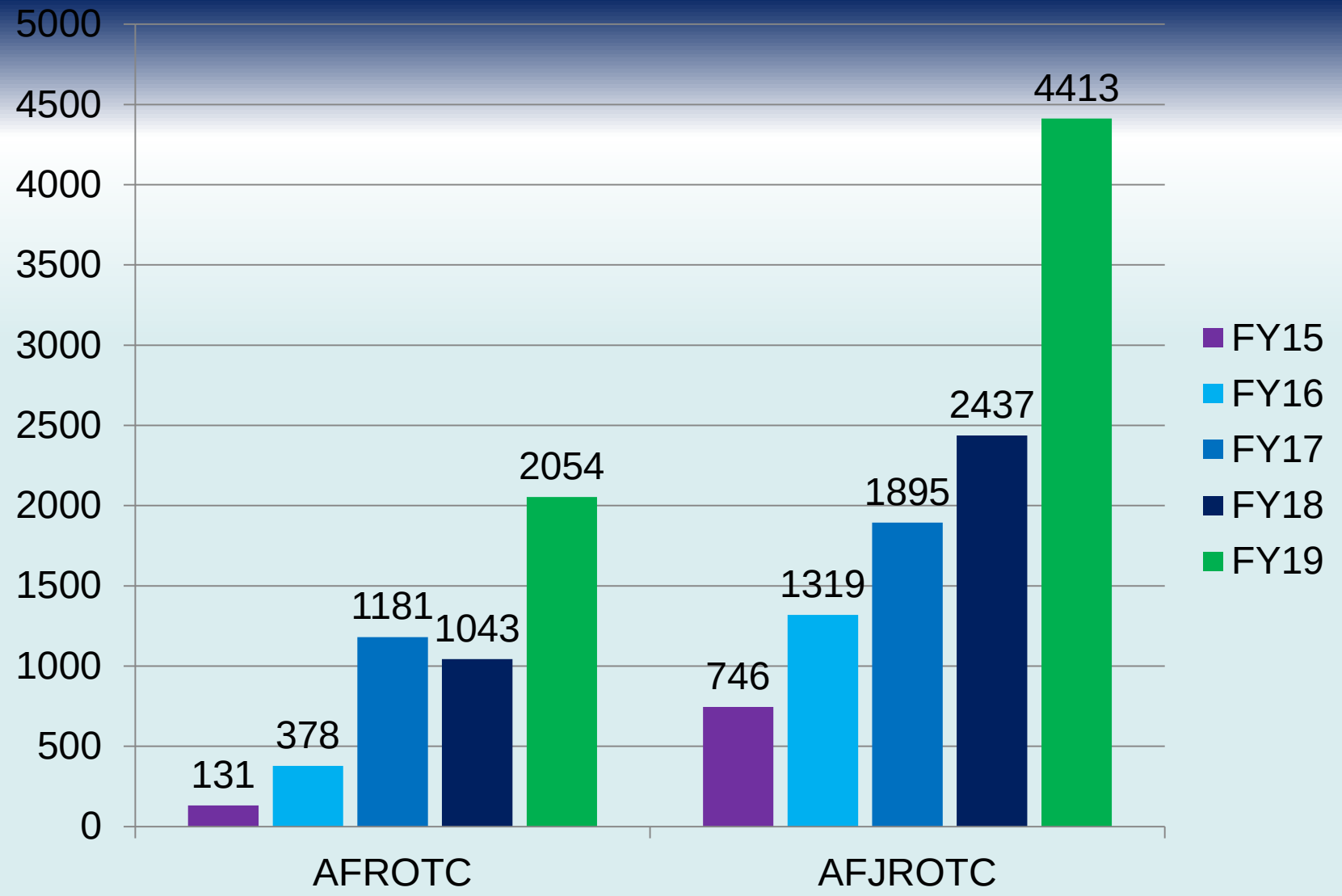
small Unmanned Aerial System (sUAS) Program

- Every wing (with the exception of IAWG) has an sUAS kit (18 months ahead of our projected schedule).
- A fixed wing E384 will be deployed to each FEMA region by the end of FY19 (12 months ahead of schedule)
- Initial Operational Capacity (IOC): Wings must have a minimum of 5 qualified sUAS Mission Pilots and 5 qualified sUAS Technicians – we'd like each Wing to reach IOC by the end of CY19! Congratulations to DC, DE, MO, MD, ND, NY & OH for reaching IOC!
- Full Operational Capability (FOC): Wings must have a minimum of 10 qualified sUAS Mission Pilots and 10 qualified sUAS Technicians – we'd like each Wing to reach FOC by the end of FY20! Congratulations to New York as our first FOC Wing!
- Draft Regulation (CAPR 70-1U) is in coordination
- Draft training materials and other support documents available online at:

https://www.gocivilairpatrol.com/programs/emergency-services/small-unmanned-aerial-systems-operations

AFROTC & AFJROTC Orientation Flying

FY19 Cadets Flown



Air Force Pilot Prep Program





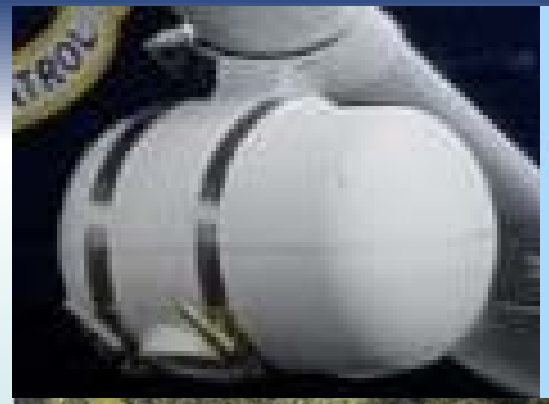


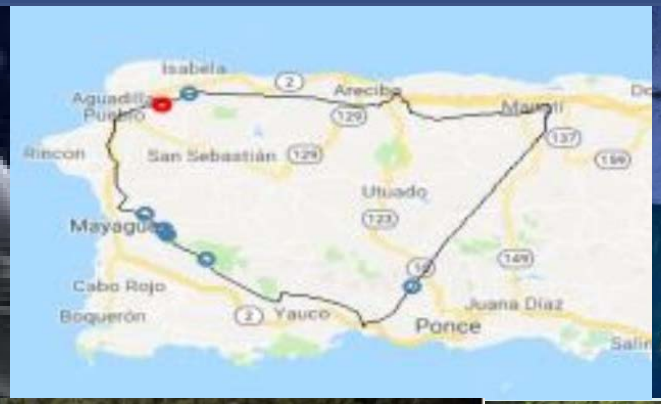




53 Air Force Officers Receive Flight Training, Ground Instruction & Sim Time

WaldoAir XCAM R Linear Feature Imaging Powerline Surveys of Puerto Rico





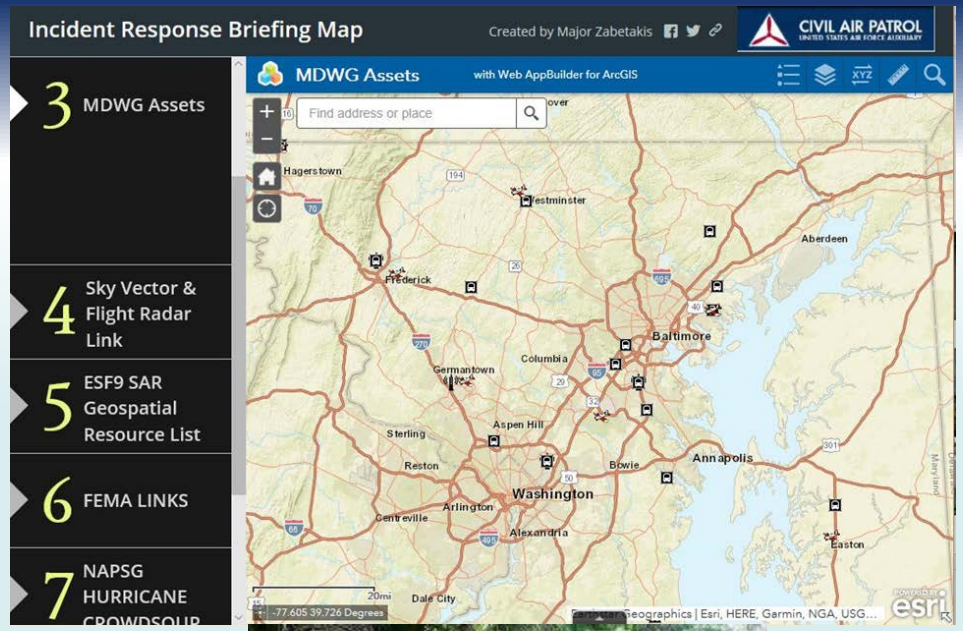






GIS Strategic Plan for CAP

- CAP GIS will support FEMA during disasters
  - We will continue imaging operations, exploit imagery from CAP and other agencies and will conduct damage assessments from imagery
  - Support FEMA personnel with story maps, studies, estimates, and reporting
- Internal to CAP:
  - Support visualization of CAP assets and readiness
  - During an incident, GIS analysis provides insight for SAR/DR operations
  - Story Map example: https://arcg.is/iv8in

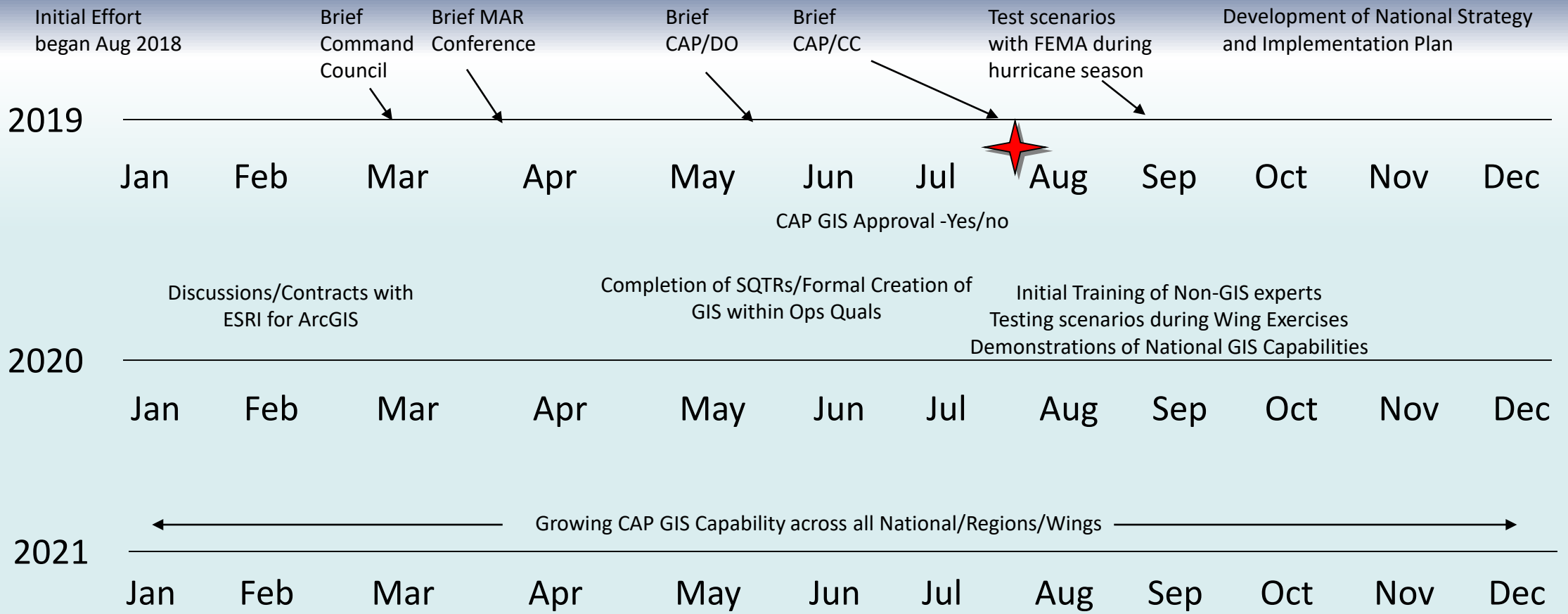








CAP GIS Development Schedule



Ops Eval 3.0

- Two week “ARDENT SENTRY” look at 2 CAP Regions
  - One two-region area every year
  - Might not include every state in the region…up to CAP, and Wings will still get individual looks on real missions
- Focused on major missions in the region
  - SAR, DR, Communications, sUAS & Orientation Flights for all Wings at a level commensurate with historical operations in recent history
  - Counterdrug & Border Ops, Range Support, Route Surveys, Air Defense, Green Flag and RPA Escort operations for Wings supporting these events; ideally viewed during the evaluation, but Eval teams will schedule visits otherwise when necessary
- Scenarios written by CAP and CAP-USAF HQ

Ops Eval 3.0

- LR interaction with the wings will not decrease
  - More money and Reserve days available for CAP-USAF travel to more events
  - Expect more visits during real events
- Less money spent by CAP & CAP-USAF on 52 Ops Evals can be diverted to other operational necessities
  - Less moves just to consolidate resources at central sites
  - Focused on general capabilities, not just to work towards overwhelming resources
- Annual awards will no longer utilize Ops Eval performance as selection criteria
- WLEs will be renamed RLEs (Region Led Exercise) and will be completely planned/executed by CAP on the second year following their Ops Eval
  - CAP-USAF will have a smaller team present to provide feedback
  - CAP Teams from other regions will be brought in to work with trusted agents from the regions in RLE
- Anticipate more accountability to AAR processes and truly learning out lessons

Ops Eval 3.0

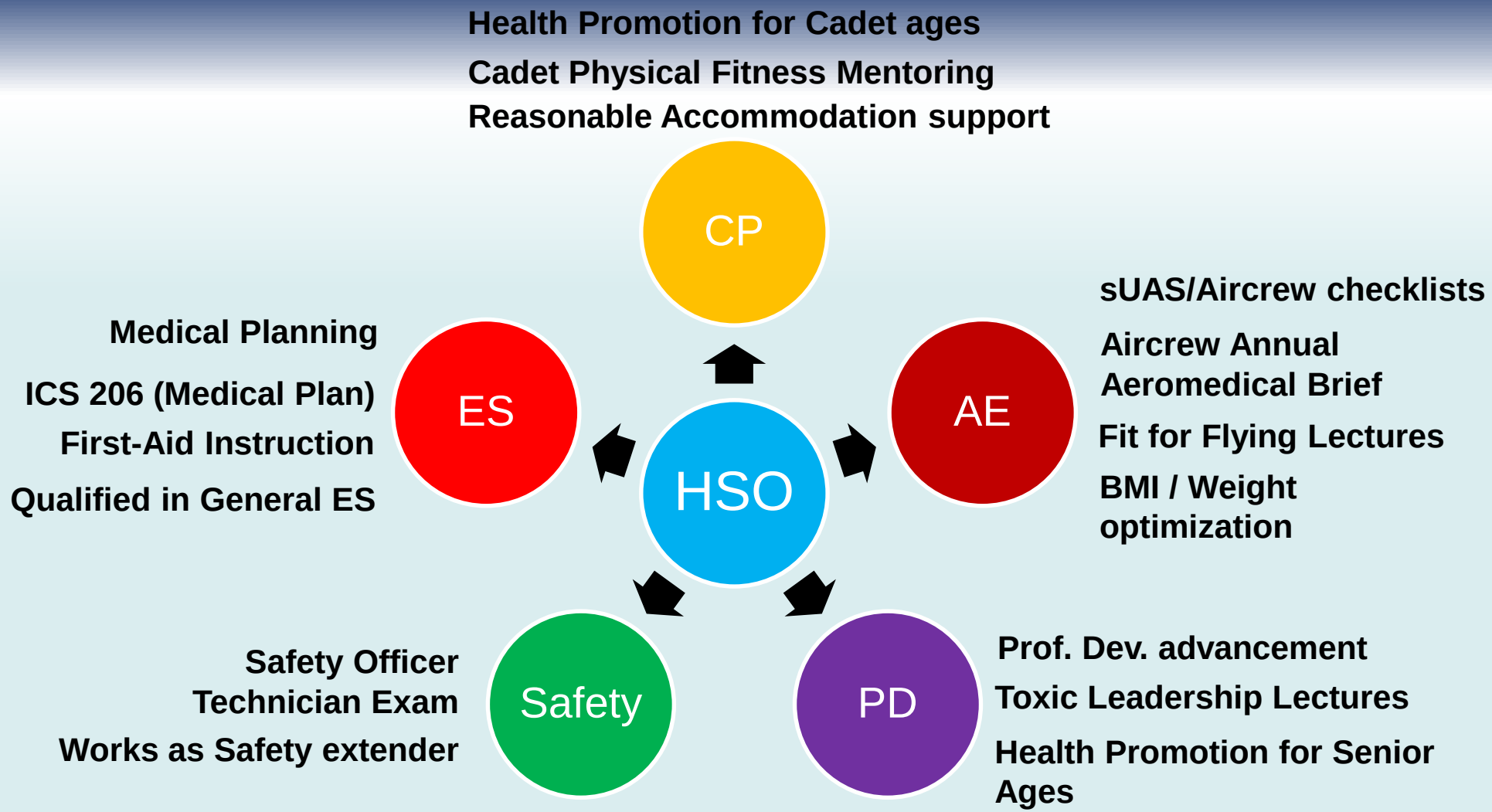
- Timeline (April to June annually)
  - 2020 (NER/MER); RLE 2022
  - 2021 (PCR/RMR); RLE 2023
  - 2022 (NCR/GLR); RLE 2020
  - 2023 (SER/SWR); RLE 2021
- Team consists of all LR personnel (CC/DO/ADO)/HQx2/CAPx2, possibly more depending on needs of the evaluation
- Scenario will test full capabilities, beginning and ending with the NOC
- Current checklist will be modified for larger scenarios, multiple mission numbers, region and national play in missions where appropriate
- Implementation began in July with working group meeting in conjunction with NESA for evaluation team critical tasks.
- CAP/DO also advertised for team members from your regions that will be vetted; we will not default to just top staff as we don't want to cripple Regions and Wings; expect initial teams to be selected in September

Ops Eval 3.0

- Why?
  - Standardize scenarios and grading nationwide
  - Reflect the operational realities of the time
  - Correct shortcomings in current evaluation process like significant variation in tests of capabilities and region level involvement, and lack of full CAP test to include National and dedicated Region resources
  - Ensure HQ Level focus (both CAP and CAP-USAF) items are being evaluated – not just an evaluation of CAP, but also CAP-USAF supporting CAP
  - Many regions have already transitioned to multi-wing evaluations, and some have essentially worked region evaluations, though they have not been calling them that specifically
  - Tests inter-Region operability

Health Services - A Mission Enabler

- The HS program is professionalizing, which will lead to consistent health information and delivery.
- Updating the Health Services Regulation (CAPR 79-1)
- Instituting a Health Services Professional Development Pamphlet (CAPP 79-1)
- Updating the Health Services Form (CAPF 79-1, 79-2, 79-3)



QUESTIONS?

