



# Defense Acquisition Workforce Key Information

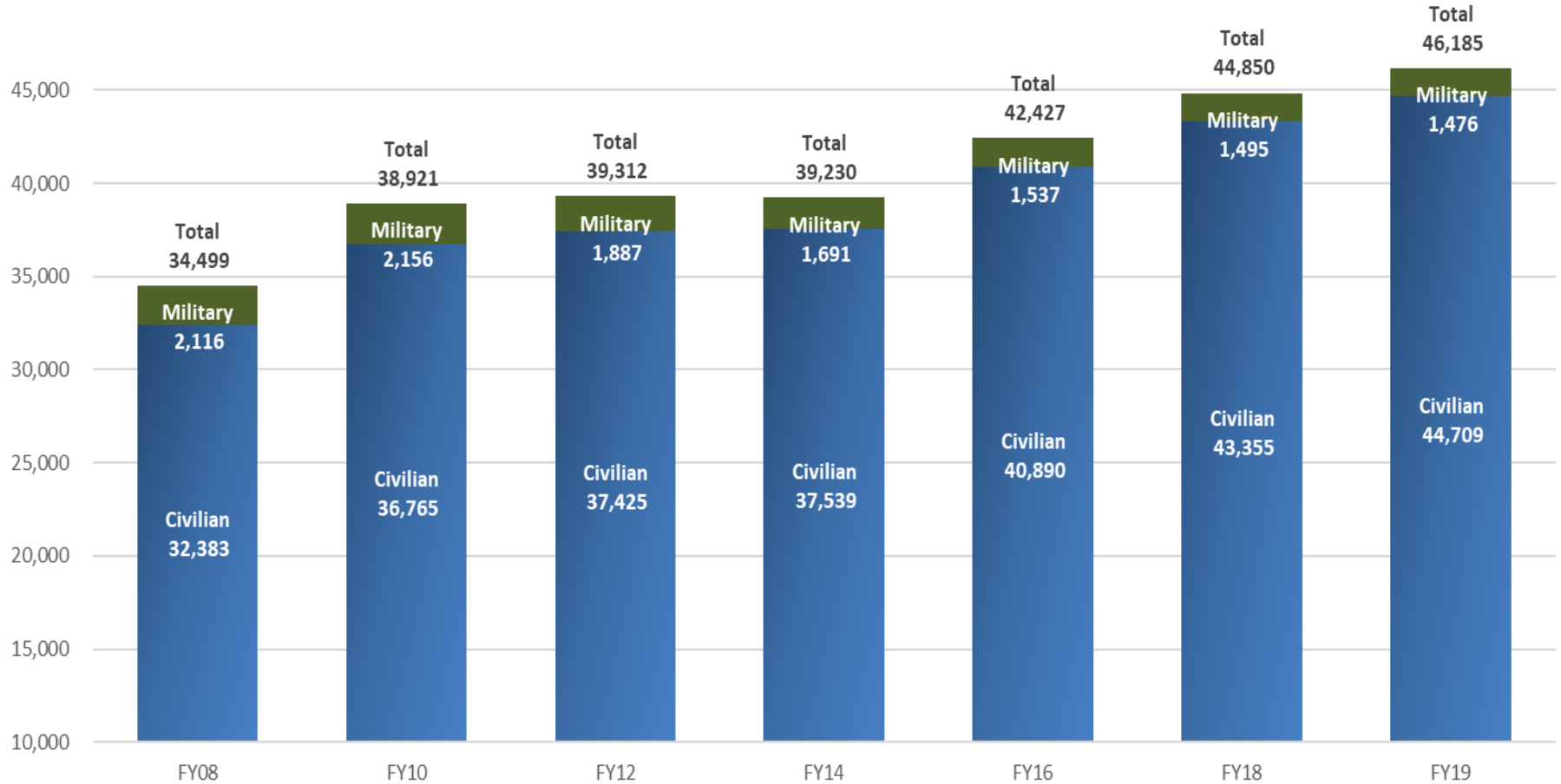
Engineering

As of FY19 (30 Sept 2018)



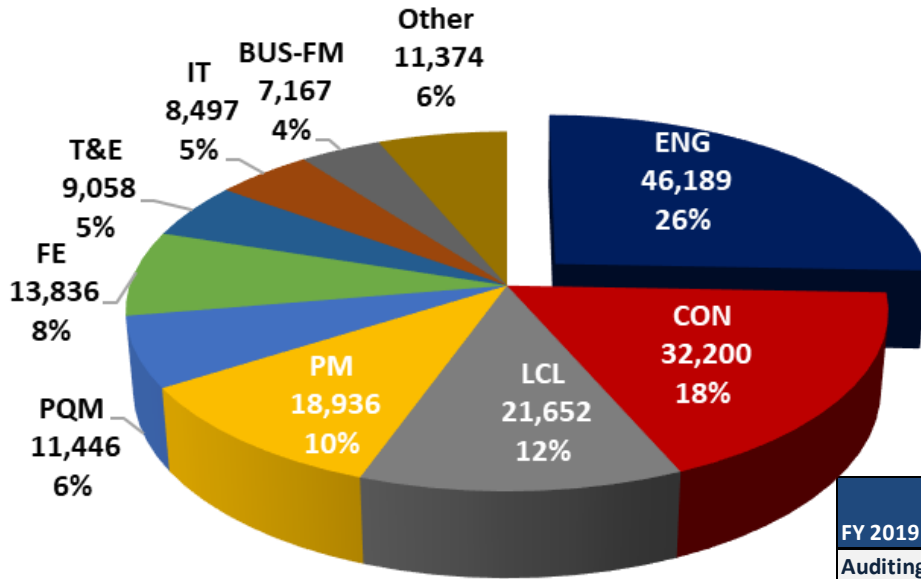
# Engineering Total Workforce

## Engineering





# AWF by Component and Career Field



FY 2019 Q4	Army	Navy	Marine Corps	Air Force	4th Estate	Totals	% Total
Auditing	-	-	-	-	3,968	3,968	2.2%
Business - CE	262	566	32	539	98	1,497	0.8%
Business - FM	1,770	2,360	176	2,231	630	7,167	4.0%
Contracting	8,543	6,406	555	8,298	8,398	32,200	17.9%
Engineering	9,207	24,470	327	9,974	2,211	46,189	25.6%
Facilities Engineering	6,312	6,684	36	701	103	13,836	7.7%
Information Technology	1,947	3,727	225	1,481	1,117	8,497	4.7%
Life Cycle Logistics	6,901	6,654	684	3,885	3,528	21,652	12.0%
Production, Quality and Man	1,361	3,874	31	485	5,695	11,446	6.3%
Program Management	3,555	5,885	772	6,765	1,959	18,936	10.5%
Property	55	68	-	19	292	434	0.2%
Purchasing	260	386	29	47	495	1,217	0.7%
S&T Manager	685	526	4	2,880	142	4,237	2.3%
Test and Evaluation	1,941	3,264	137	3,365	351	9,058	5.0%
Unknown/Other	7	2	1	5	6	21	0.0%
<b>Totals</b>	<b>42,806</b>	<b>64,872</b>	<b>3,009</b>	<b>40,675</b>	<b>28,993</b>	<b>180,355</b>	
<b>Component %</b>	<b>23.7%</b>	<b>36.0%</b>	<b>1.7%</b>	<b>22.6%</b>	<b>16.1%</b>		



# Engineering Workforce Historical Size by Agency FY08 – FY19



Engineering Defense Acq Workforce Agency	FY08	FY10	FY12	FY14	FY16	FY18	FY19	% Change Since FY08	% Change Since FY18
Navy	16,353	18,932	19,121	19,423	21,623	23,678	24,470	50%	3%
MARINE CORPS	223	338	377	374	354	336	327	47%	-3%
AIR FORCE	6,429	7,625	8,570	8,473	9,139	9,535	9,974	55%	5%
ARMY	10,769	10,644	9,810	8,981	9,140	9,160	9,207	-15%	1%
DCMA	282	813	974	1,157	1,271	1,238	1,279	354%	3%
MDA	281	623	644	605	601	604	615	119%	2%
DISA	89	58	69	74	70	89	85	-4%	-4%
NRO	-	-	-	-	66	64	80		25%
DAU	33	46	49	40	45	48	47	42%	-2%
DTRA	7	27	35	44	47	21	18	157%	-14%
DMEA	-	29	23	20	32	27	39		44%
OSD	31	25	21	23	22	16	14	-55%	-13%
DLA	19	16	11	11	13	12	13	-32%	8%
DHA	2	9	10	6	4	9	9	350%	0%
JCS	-	-	12	10	7	8	6		-25%
DeCA	-	-	-	-	3	4	5		25%
TRMC	-	-	1	1	1	1	1		0%
DTIC	1	-	-	-	-	-	-	-100%	
DSCA	1	-	-	-	-	-	-	-100%	
IG	1	-	-	-	-	-	-	-100%	
ASD	-	4	1	-	-	-	-		
<b>TOTAL</b>	<b>34,521</b>	<b>39,189</b>	<b>39,728</b>	<b>39,242</b>	<b>42,438</b>	<b>44,850</b>	<b>46,189</b>	<b>↑ 30%</b>	<b>↑ 3%</b>



# Engineering Workforce Historical Size by Agency (Quarterly)



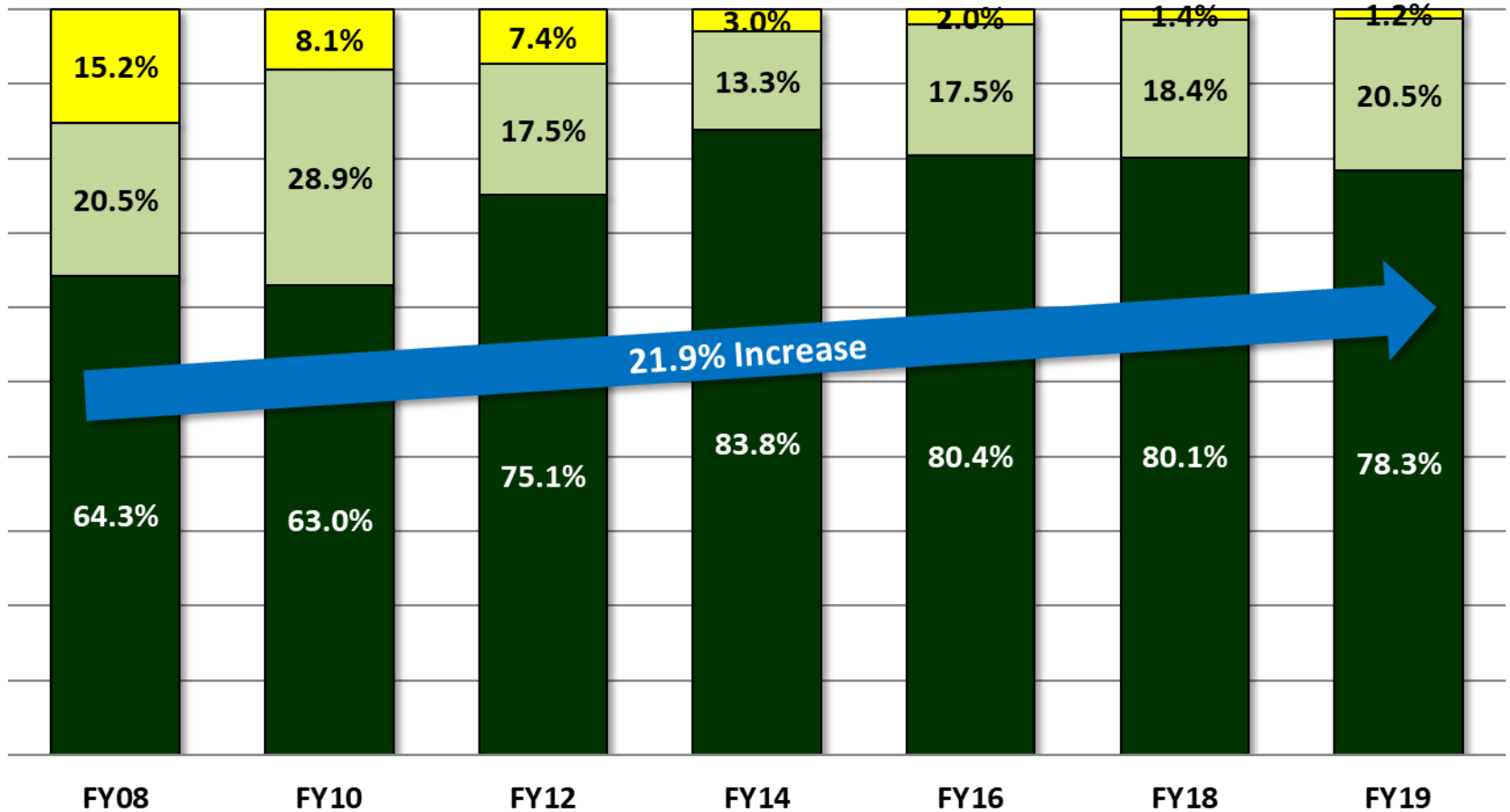
Engineering Defense Acq Workforce Agency	FY17Q4	FY18Q1	FY18Q2	FY18Q3	FY18Q4	FY19Q1	FY19Q2	FY19Q3	FY19Q4	% Change Since FY18Q4
Navy	22,297	22,276	22,376	22,726	23,678	23,650	23,608	23,834	24,470	3%
MARINE CORPS	341	339	336	342	336	328	325	321	327	-3%
AIR FORCE	9,276	9,178	9,271	9,385	9,535	9,604	9,652	9,572	9,974	5%
ARMY	9,096	9,084	9,060	9,024	9,160	9,148	9,094	9,090	9,207	1%
DCMA	1,229	1,226	1,231	1,220	1,238	1,223	1,241	1,263	1,279	3%
MDA	603	597	594	594	604	602	606	609	615	2%
DISA	66	68	66	68	89	88	87	83	85	-4%
NRO	78	78	72	56	64	64	69	75	80	25%
DAU	43	46	47	48	48	48	48	49	47	-2%
DTRA	35	31	30	30	21	18	18	19	18	-14%
DMEA	31	32	31	29	27	27	27	33	39	44%
OSD	22	22	22	21	16	16	14	16	14	-13%
DLA	14	14	14	15	12	12	13	12	13	8%
DHA	8	8	9	9	9	10	10	9	9	0%
JCS	6	6	8	7	8	8	8	7	6	-25%
DeCA	3	4	4	5	4	3	4	5	5	25%
TRMC	1	1	1	1	1	1	1	1	1	0%
<b>TOTAL</b>	<b>43,149</b>	<b>43,010</b>	<b>43,172</b>	<b>43,580</b>	<b>44,850</b>	<b>44,850</b>	<b>44,825</b>	<b>44,998</b>	<b>46,189</b>	<b>↑ 3%</b>



# Engineering Manager Historical DAWIA Certification FY08 – FY19



## Engineering



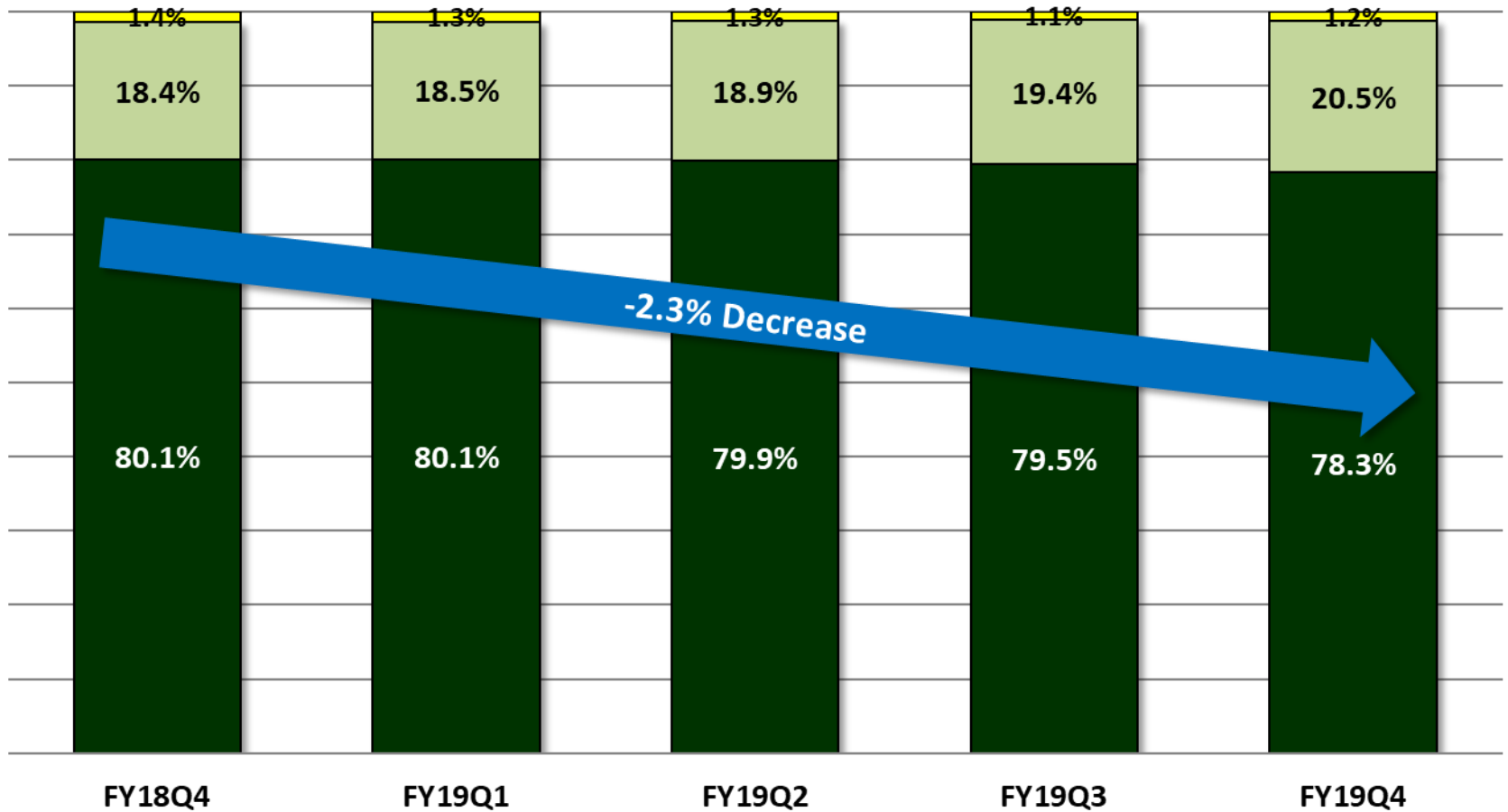
■ Meets/Exceeds    ■ Within 24 Months    ■ Does Not Meet    \* Rounded to nearest 0.1%



# Engineering Manager Historical (Quarterly) DAWIA Certification



## Engineering



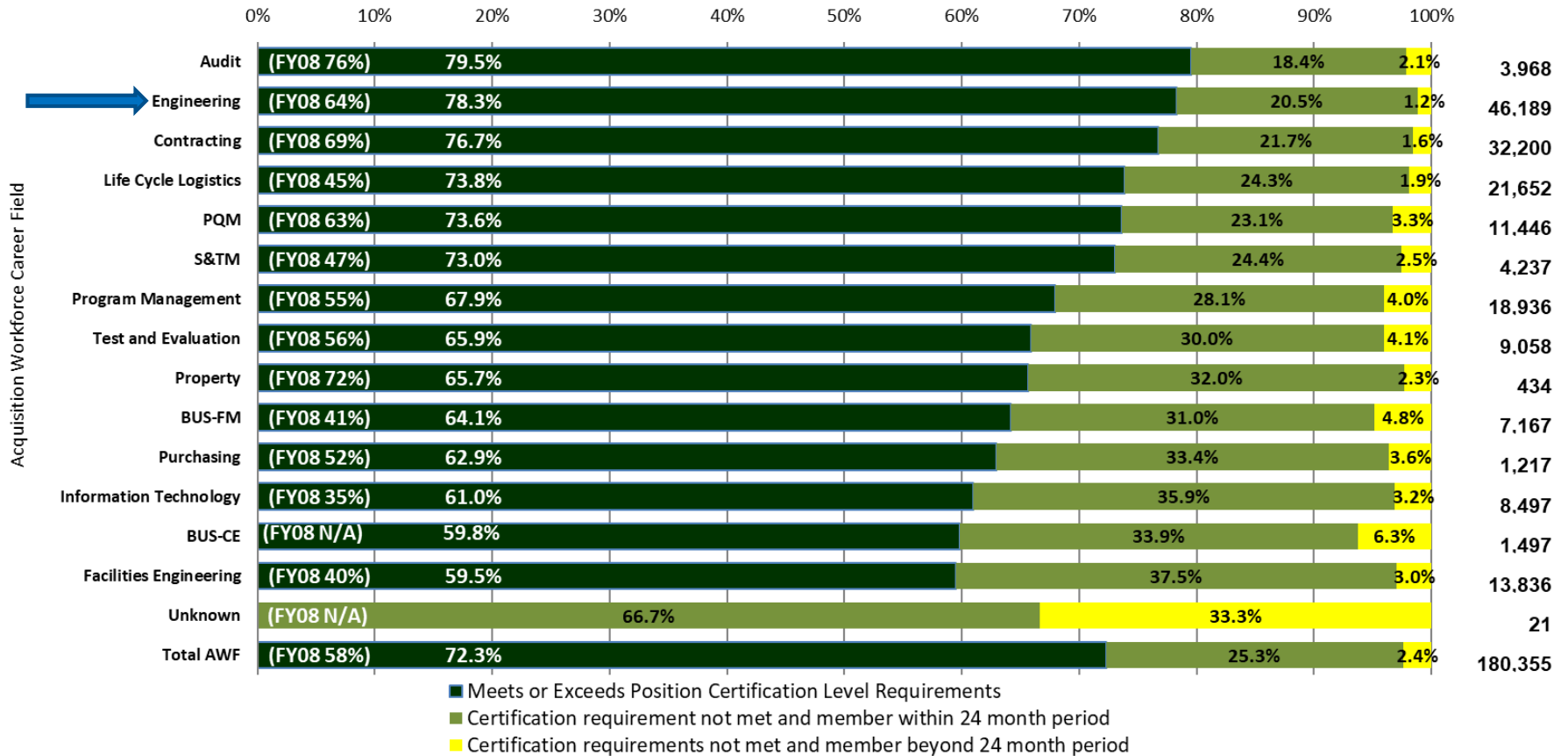
■ Meets/Exceeds    ■ Within 24 Months    ■ Does Not Meet    \* Rounded to nearest 0.1%



# DAWIA Certification by Career Field



## Certification Level "Meet/Exceed" Rates by Career Field AWF (FY19Q4)

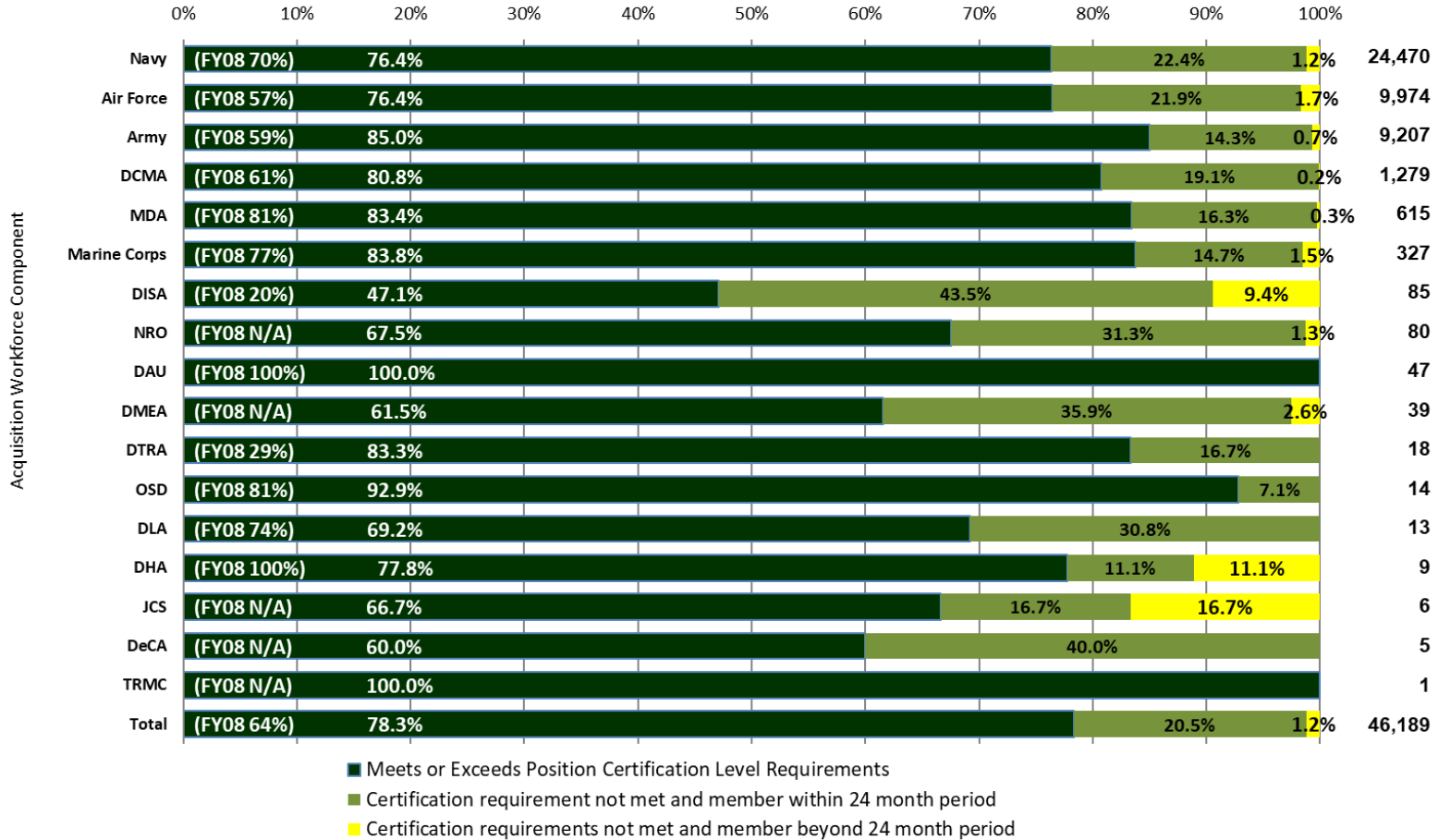






# Engineering DAWIA Certification by Component

## Certification Level "Meet/Exceed" Rates by Component Engineering (FY19Q4)





# Engineering DAWIA Certification Matrix + Bench Strength

Required Certification Level	Achieved Certification Level				FY19Q4 TOTAL	% Meets Certification Requirement
	No Level Achieved	Level I	Level II	Level III		
Level I	4,286	5,448	1,629	1,577	12,940	66.9%
Level II	2,003	1,976	7,442	6,589	18,010	77.9%
Level III	638	302	804	13,491	15,235	88.6%
<i>Unspecified</i>	3	1	-	-	4	
<b>FY19Q4 TOTAL</b>	6,930	7,727	9,875	21,657	46,189	78.3%
	15.0%	16.7%	21.4%	46.9%		

No Level Achieved includes those within the 24 month grace period

Bench Strength			
Org	# Meet or Exceeds	% Meets or Exceeds*	Career Field Rank
DAW	130,329	72.3%	
Army	32,841	76.7%	
Navy	45,858	70.7%	
Marine Cor	2,004	66.6%	
Air Force	27,499	67.6%	
4th Estate	22,127	76.3%	
Engineering	36,176	78.3%	1 of 14

\*\* Based on population total without unspecified positions

Certification Requirement	Meets	Within 24 Months	Does Not Meet	DAW TOTAL	
Level I	8,654	4,225	61	12,940	28.0%
Level II	14,031	3,678	301	18,010	39.0%
Level III	13,491	1,556	188	15,235	33.0%
<i>Unspecified</i>	-	4	-	4	0.0%
<b>Engineering TOTAL</b>	<b>36,176</b>	<b>9,463</b>	<b>550</b>	<b>46,189</b>	
	78.3%	20.5%	1.2%		

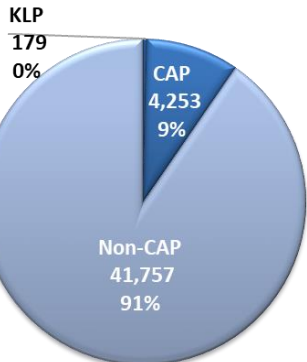
  = Compliance  
  = Exceeds Requirements

\* NOTE: Rounded to nearest 0.1%

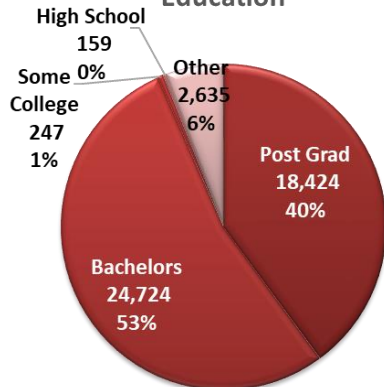


# Demographics

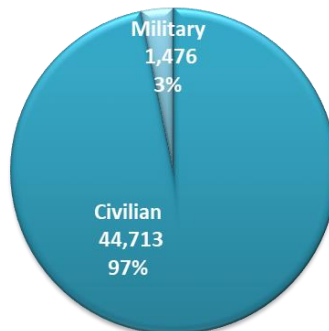
KLP - CAP - Non-CAP



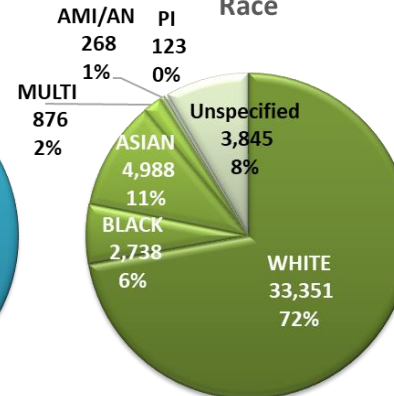
Education



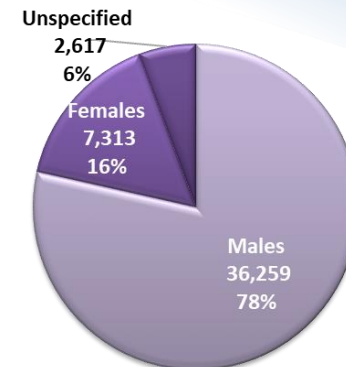
Civilian / Military



Race



Gender



Occupied Position Type	ENG TOTAL		Entire AWF	
Key Leadership Positions (KLPs)	179	0.4%	1,262	0.7%
Critical Acquisition Positions (CAPs) *	4,253	9.2%	16,850	9.3%
Non-CAP Positions	41,757	90.4%	162,243	90.0%
Unknown	-	0.0%	-	0.0%
<b>TOTAL</b>	<b>46,189</b>		<b>180,355</b>	

\* = Number of CAPs, excluding KLPs (no double counts)

Race	ENG TOTAL		Entire DAW	
WHITE	33,351	72.2%	124,352	68.9%
BLACK	2,738	5.9%	20,560	11.4%
ASIAN	4,988	10.8%	11,804	6.5%
MULTI	876	1.9%	4,751	2.6%
AMI/AN	268	0.6%	1,127	0.6%
PI	123	0.3%	904	0.5%
Unspecified	3,845	8.3%	16,857	9.3%
<b>TOTAL</b>	<b>46,189</b>		<b>180,355</b>	

Highest Level of Education	ENG TOTAL		Entire AWF	
Post Grad	18,424	39.9%	68,893	38.2%
Bachelors	24,724	53.5%	75,106	41.6%
Some College	247	0.5%	11,844	6.6%
High School	159	0.3%	12,311	6.8%
Other	2,635	5.7%	12,201	6.8%
<b>TOTAL</b>	<b>46,189</b>		<b>180,355</b>	

Gender	ENG TOTAL		Entire DAW	
Males	36,259	78.5%	119,066	66.0%
Females	7,313	15.8%	49,475	27.4%
Unspecified	2,617	5.7%	11,814	6.6%
<b>TOTAL</b>	<b>46,189</b>		<b>180,355</b>	

Type	ENG TOTAL		Entire AWF	
Civilian	44,713	96.8%	164,118	91.0%
Military	1,476	3.2%	16,237	9.0%
<b>TOTAL</b>	<b>46,189</b>		<b>180,355</b>	



# Engineering Size by Occupational Series

Civilian Occupational Series	ENG TOTAL	
0855 - Engineer, Electronics	10,509	23.5%
0801 - Engineer, General	9,258	20.7%
0830 - Engineer, Mechanical	7,211	16.1%
1550 - Computer Scientist	4,681	10.5%
0861 - Engineer, Aerospace	3,151	7.0%
0854 - Engineer, Computers	2,790	6.2%
0850 - Engineer, Electrical	1,812	4.1%
1515 - Operations Research Analyst	695	1.6%
1310 - Physicist	642	1.4%
Other	3,448	7.7%
<b>TOTAL CIVILIAN</b>	<b>44,713</b>	<b>Civilians</b>