Comparative Costs of Aviation Units

Purpose

- Estimate costs of alternative aviation COAs developed by NCFA
  - Only estimate costs that result in increases or decreases compared with ARI baseline
- Look at two independently-developed cost estimates:
  - RAND cost estimate
  - NCFA staff cost estimate

NCFA-Developed Alternative COAs

Costs Elements and Assumptions Included in this Analysis

Impacts to Annual Operations and Support Costs

Related to:	Cost Increase/ Decrease	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	Add 2 ARNG ARBs	Add 4 ARNG ARBs		Add 6 ARNG ARBs
	(-) Decrease	Don't add 2 ARNG UH-60 BNs - Excursion is 3 less UH-60 BNs			
	(+) Increase	No Change	CONUS AH-64 redistribution*	No Change	CONUS AH-64 redistribution*
Korea Posture	(+) Increase	Forward station 2 ARB/H-ARS & CAB HQ	Forward station CAB HQ	No Change	Forward station CAB HQ
	(-) Decrease	Avoided personnel transport for deployment		No Change	Avoided pers trans for deployment
Offsets Outside of Aviation	(-) Decrease	AC force structure offsets outside of aviation			
	(-) Decrease	ARNG force structure offsets outside of aviation			

Impacts to One-Time Procurment Costs

Related to:	Cost Increase/ Decrease	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	No Change	(+) 24 ARNG AH-64s (all reman)	(+) 72 ARNG AH-64s (26 reman, 46 new)	(+) 30 ARNG AH-64s (26 reman, 4 new)
	(-) Decrease	(-) 60 ARNG UH-60s (all L to V conversion) - Excursion is 90 less			
Korea Posture	(-) Decrease	No Change	(-) 53 AC UH-60 (8 L to V, 45 Ms)	No Change	(-) 53 AC UH-60 (8 L to V, 45 Ms)

NOTES: Most significant cost drivers are in bold/underlined
*Assumes CONUS redistribution of AC AH-64s is in addition to flying hours program, but redistribution of ARNG AH-64s is within flying hours program

RAND Cost Estimate Summary

- **Primary COAs (2 fewer ARNG UH-60 BNs than ARI):**

		Costs are FY 2015 $M			
Cost Category	**Costs Related to:**	**COA A**	**COA B**	**COA B'**	**COA C**
Operations and Support (O&S)	ARNG Force Structure	$26.7	$100.6	$97.7	$171.6
	Korea Posture	$21.2	$8.0	$0.0	$8.0
	Total (per Year)	**$47.9**	**$108.6**	**$97.7**	**$179.5**
	Total (5 Year)	**$239.4**	**$542.8**	**$488.5**	**$897.7**
Procurement	ARNG Force Structure	($172.0)	$245.7	$2,080.6	$437.1
	Korea Posture	$0.0	($888.2)	$0.0	($888.2)
	Total	**($172.0)**	**($642.5)**	**$2,080.6**	**($451.2)**

- **Excursions (3 fewer ARNG UH-60 BNs than ARI):**

		Costs are FY 2015 $M			
Cost Category	**Costs Related to:**	**COA A**	**COA B**	**COA B'**	**COA C**
Operations and Support (O&S)	ARNG Force Structure	$4.5	$78.4	$75.5	$149.4
	Korea Posture	$21.2	$8.0	$0.0	$8.0
	Total (per Year)	**$25.7**	**$86.4**	**$75.5**	**$157.4**
	Total (5 Year)	**$128.7**	**$432.0**	**$377.7**	**$787.0**
Procurement	ARNG Force Structure	($258.1)	$159.7	$1,994.6	$351.0
	Korea Posture	$0.0	($888.3)	$0.0	($888.3)
	Total	**($258.1)**	**($728.6)**	**$1,994.6**	**($537.2)**

NOTES:
1) Charts show "steady state" O&S costs - costs are not specifically related to actual FYs in the FYDP (i.e., under ARI, ARNG units deactivate/convert in FYs 2016-19 – not explicitly factored into above costs);
2) Assumes ARNG units Mobilize at 1:5 MOB:Dwell (i.e., includes extra pre-MOB and MOB year costs);
3) Without offsetting force structure costs outside of aviation, COA costs are substantially higher ($5M to $60M per year)
4) Most or all procurement costs/savings in primary COAs/excursions are likely to occur after POM FY 2017-21
5) Numbers in black are costs, numbers in (red) are savings

COA Cost Estimates

2 AHBs from ARNG	Best Case			Worst Case		
FY-15 M	COA A	COA B	COA C	COA A	COA B	COA C
Force Structure	$28.2	$76.1	$124.0	$28.2	$76.1	$124.0
Korea Posture	$17.75	$6.45	$6.4	$17.8	$6.4	$6.4
Recurring Total	**$45.91**	**$82.5**	**$130.5**	**$45.9**	**$82.5**	**$130.5**
Procurement	($172.0)	($642.5)	($538.1)	($172.0)	($121.1)	$113.7

Assumes the elimination of 2 AHBs from the ARNG
Best case reflects all AH-64 procurement would be remans
Worst case reflects all AH-64 procurement would be new buys
Procurement savings are one time will not take place prior to FY-17
Some procurement savings will be outside the FYDP
Costs in Force Structure and Korea Posture are annual costs

COA Cost Estimates

3 AHBs from ARNG	Best Case			Worst Case		
FY-15 M	COA A	COA B	COA C	COA A	COA B	COA C
Force Structure	$18.3	$66.2	$114.1	$18.3	$66.2	$114.1
Korea Posture	$17.75	$6.45	$6.4	$17.8	$6.4	$6.4
Recurring Total	**$36.02**	**$72.7**	**$120.6**	**$36.0**	**$72.7**	**$120.6**
Procurement	($258.1)	($728.5)	($624.1)	($258.1)	($207.1)	$27.7

Assumes elimination of 3 AHBs from the ARNG
Best case reflects all AH-64 procurement would be remans
Worst case reflects all AH-64 procurement would be new buys
Procurement savings are one time will not take place prior to FY-17
Some procurement savings will be outside the FYDP
Costs in Force Structure and Korea Posture are annual costs

Summary

All costs are in $FY15 M

- **Primary COAs (2 fewer ARNG UH-60 BNs than ARI):**

Estimate	Cost Category	COA	COA B	COA B'	COA C
RAND	O&S (5 Year)	$239	$543	$488	$898
	Procurement	($172)	($643)	$2,081	($451)
NCFA Staff	O&S (5 Year)	$230	$413	N/A	$652
	Procurement	($172)	($643) - ($121)	N/A	($538) - $114

- **Excursions (3 fewer ARNG UH-60 BNs than ARI):**

Estimate	Cost Category	COA	COA B	COA B'	COA C
RAND	O&S (5 Year)	$129	$432	$378	$787
	Procurement	($258)	($729)	$1,995	($537)
NCFA Staff	O&S (5 Year)	$180.2	$363.0	N/A	$603
	Procurement	($258.1)	($729) - ($207)	N/A	($624) - $28

- **Primary reasons costs differ between RAND and NCFA Staff:**
  - O&S: NCFA Staff uses HQDA planning "aim points"; RAND does not
  - AH-64 Procurement: NCFA Staff uses "best case" (all reman) and "worst case" (all new build); RAND assumes 26 remans is "most likely," and rest are new build

Other Costs Not Included in Estimates

- Annual cost savings for not having to maintain and/or store stay-behind equipment
- Potential annual savings/costs at FT Rucker schoolhouse based on different ARNG pilot numbers/specializations, compared with ARI
- One time cost savings for not having to train 2 or 3 BNs of UH-60 pilots

- These costs should not substantially impact the overall estimates

RAND Back-Ups

RAND Cost Estimate Summary

Primary COA (2 Fewer ARNG UH-60 BNs than ARI)

Shows Direct Costs for COA and Cost Offsets Outside of Aviation

			Costs are FY 2015 $M			
Cost Category	**Direct or Offset**	**Costs Related to:**	**COA A**	**COA B**	**COA B'**	**COA C**
Operations and Support (O&S)	Direct Costs for COA	ARNG Force Structure	$27.6	$124.1	$121.2	$217.7
		Korea Posture	$35.7	$22.5	$0.0	$22.5
		Sub-Total (per Year)	**$63.3**	**$146.6**	**$121.2**	**$240.2**
		Sub-Total (5 Year)	**$316.6**	**$733.0**	**$606.0**	**$1,201.0**
	Cost Offsets Outside of Aviation	ARNG Force Structure	($0.9)	($23.5)	($23.5)	($46.1)
		Korea Posture	($14.5)	($14.5)	$0.0	($14.5)
		Sub-Total (per Year)	**($15.4)**	**($38.0)**	**($23.5)**	**($60.6)**
		Sub-Total (5 Year)	**($77.2)**	**($190.2)**	**($117.5)**	**($303.2)**
	Combined	ARNG Force Structure	$26.7	$100.6	$97.7	$171.6
		Korea Posture	$21.2	$8.0	$0.0	$8.0
		Total (per Year)	**$47.9**	**$108.6**	**$97.7**	**$179.5**
		Total (5 Year)	**$239.43**	**$542.76**	**$488.46**	**$897.74**
Procurement	Direct Costs for COA	ARNG Force Structure	($172.0)	$245.7	$2,080.6	$437.1
		Korea Posture	$0.0	($888.2)	$0.0	($888.2)
		Total	**($172.0)**	**($642.5)**	**$2,080.6**	**($451.2)**

NOTES: 1) Charts show "steady state" O&S costs, but they are not specifically related to an actual FYs in the FYDP;
2) Assumes ARNG units Mobilize at 1:5 MOB:Dwell (i.e., includes extra pre-MOB and MOB year costs);
3) Most or all procurement costs/savings in primary COAs/excursions are likely to occur after POM FY 2017-21

RAND Cost Estimate Detail

Primary COA (2 Fewer ARNG UH-60 BNs than ARI)

- **Annual Operations and Support Costs:**

Related to:	Cost Increase/ Decrease	Cost	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	ARNG ARBs	$93.6	$187.2	$187.2	$280.8
	(-) Decrease	ARNG UH-60 BNs	($66.0)	($66.0)	($66.0)	($66.0)
	(+) Increase	CONUS redistribution of AH-64s		$2.9		$2.9
Korea Posture	(+) Increase	Fwd stationing of units	$41.4	$23.4		$23.4
	(-) Decrease	Avoided pers transport for deployment	($5.7)	($0.9)		($0.9)
Offsets Outside of Aviation	(-) Decrease	AC force structure offsets outside of aviation	($14.5)	($14.5)	$0.0	($14.5)
	(-) Decrease	ARNG force structure offsets outside of aviation	($0.9)	($23.5)	($23.5)	($46.1)
Total			**$47.9**	**$108.6**	**$97.7**	**$179.5**

- **One-Time Procurement Costs:**

Related to:	Cost Increase/ Decrease	Cost	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	AH-64 procuremet	$0.0	$417.7	$2,252.6	$609.1
	(-) Decrease	Avoided UH-60 procurement	($172.0)	($172.0)	($172.0)	($172.0)
Korea Posture	(-) Decrease	Avoided UH-60 procurement	$0.0	($888.2)	$0.0	($888.2)
Total			**($172.0)**	**($642.5)**	**$2,080.6**	**($451.2)**

RAND

NOTES: 1) Charts show "steady state" O&S costs, but they are not specifically related to an actual FYs in the FYDP;
2) Assumes ARNG units Mobilize at 1:5 MOB:Dwell (i.e., includes extra pre-MOB and MOB year costs);
3) Most or all procurement costs/savings in primary COAs/excursions are likely to occur after POM FY 2017-21

RAND Cost Estimate Summary

Excursion COA (2 Fewer ARNG UH-60 BNs than ARI)

Shows Direct Costs for COA and Cost Offsets Outside of Aviation

			Costs are FY 2015 $M			
Cost Category	**Direct or Offset**	**Costs Related to:**	**COA A**	**COA B**	**COA B'**	**COA C**
Operations and Support (O&S)	Direct Costs for COA	ARNG Force Structure	($5.4)	$91.1	$88.2	$184.7
		Korea Posture	$35.7	$22.5	$0.0	$22.5
		Sub-Total (per Year)	**$30.3**	**$113.6**	**$88.2**	**$207.2**
		Sub-Total (5 Year)	**$151.6**	**$568.0**	**$441.0**	**$1,036.0**
	Cost Offsets Outside of Aviation	ARNG Force Structure	$9.9	($12.7)	($12.7)	($35.3)
		Korea Posture	($14.5)	($14.5)	$0.0	($14.5)
		Sub-Total (per Year)	**($4.6)**	**($27.2)**	**($12.7)**	**($49.8)**
		Sub-Total (5 Year)	**($22.9)**	**($136.0)**	**($63.3)**	**($249.0)**
	Combined	ARNG Force Structure	$4.5	$78.4	$75.5	$149.4
		Korea Posture	$21.2	$8.0	$0.0	$8.0
		Total (per Year)	**$25.7**	**$86.4**	**$75.5**	**$157.4**
		Total (5 Year)	**$128.69**	**$432.01**	**$377.71**	**$786.99**
Procurement	Direct Costs for COA	ARNG Force Structure	($258.1)	$159.7	$1,994.6	$351.0
		Korea Posture	$0.0	($888.3)	$0.0	($888.3)
		Total	**($258.1)**	**($728.6)**	**$1,994.6**	**($537.2)**

NOTES: 1) Charts show "steady state" O&S costs, but they are not specifically related to an actual FYs in the FYDP;
2) Assumes ARNG units Mobilize at 1:5 MOB:Dwell (i.e., includes extra pre-MOB and MOB year costs);
3) Most or all procurement costs/savings in primary COAs/excursions are likely to occur after POM FY 2017-21

RAND Cost Estimate Detail

Excursion COA (3 Fewer ARNG UH-60 BNs than ARI)

- **Annual Operations and Support Costs:**

Related to:	Cost Increase/ Decrease	Cost	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	ARNG ARBs	$93.6	$187.2	$187.2	$280.8
	(-) Decrease	ARNG UH-60 BNs	($99.0)	($99.0)	($99.0)	($99.0)
	(+) Increase	CONUS redistribution of AH-64s		$2.9		$2.9
Korea Posture	(+) Increase	Fwd stationing of units	$41.4	$23.4		$23.4
	(-) Decrease	Avoided pers transport for deployment	($5.7)	($0.9)		($0.9)
Offsets Outside of Aviation	(-) Decrease	AC force structure offsets outside of aviation	($14.5)	($14.5)	$0.0	($14.5)
	(-) Decrease	ARNG force structure offsets outside of aviation	$9.9	($12.7)	($12.7)	($35.3)
Total			**$25.7**	**$86.4**	**$75.5**	**$157.4**

- **One-Time Procurement Costs:**

Related to:	Cost Increase/ Decrease	Cost	COA A	COA B	COA B'	COA C
ARNG Force Structure	(+) Increase	AH-64 procuremet	$0.0	$417.7	$2,252.6	$609.1
	(-) Decrease	Avoided UH-60 procurement	($258.1)	($258.1)	($258.1)	($258.1)
Korea Posture	(-) Decrease	Avoided UH-60 procurement	$0.0	($888.3)	$0.0	($888.3)
Total			**($258.1)**	**($728.6)**	**$1,994.6**	**($537.2)**

RAND

NOTES: 1) Charts show "steady state" O&S costs, but they are not specifically related to an actual FYs in the FYDP;
2) Assumes ARNG units Mobilize at 1:5 MOB:Dwell (i.e., includes extra pre-MOB and MOB year costs);
3) Most or all procurement costs/savings in primary COAs/excursions are likely to occur after POM FY 2017-21

Annual O&S Cost Estimates for AH-64 & UH-60 BNs (FY15 $M)

- FORCES Flying Hours; MILTECHs from RFI (Authorizations):

	Cost Summary		Assumptions (AH-64)			Assumptions (UH-60)		
Year	One AH-64 BN	One UH-60 BN	Flying Hrs (non-MOB)	AGRs	MILTECHs	Flying Hrs (non-MOB)	AGRs	MILTECHs
Baseline	$43.1	$26.8	8.6	25	156	5.8	28	71
Pre-MOB	$47.1	$31.5	8.6	25	156	5.8	28	71
MOB	$69.1	$54.7	Same as AC	25	156	Same as AC	28	71
1:5 Avg	$48.1	$32.2						
1:4 Avg	$49.1	$33.3						
1:3 Avg	$50.6	$34.9						

- Alt Flying Hours; MILTECHs from RFI (Authorizations)

	Cost Summary		Assumptions (AH-64)			Assumptions (UH-60)		
Year	One AH-64 BN	One UH-60 BN	Flying Hrs (non-MOB)	AGRs	MILTECHs	Flying Hrs (non-MOB)	AGRs	MILTECHs
Baseline	$41.5	$27.7	7.7	25	156	6.5	28	71
Pre-MOB	$45.5	$32.5	7.7	25	156	6.5	28	71
MOB	$69.1	$54.7	Same as AC	25	156	Same as AC	28	71
1:5 Avg	$46.8	$33.0						
1:4 Avg	$47.8	$34.1						
1:3 Avg	$49.4	$35.7						

- Alt Flying Hours; MILTECHs DMDC (On Hand)

	Cost Summary		Assumptions (AH-64)			Assumptions (UH-60)		
Year	One AH-64 BN	One UH-60 BN	Flying Hrs (non-MOB)	AGRs	MILTECHs	Flying Hrs (non-MOB)	AGRs	MILTECHs
Baseline	$37.7	$29.9	7.7	25	107	6.5	28	99
Pre-MOB	$41.7	$34.6	7.7	25	107	6.5	28	99
MOB	$69.1	$54.7	Same as AC	25	107	Same as AC	28	99
1:5 Avg	$43.6	$34.8						
1:4 Avg	$44.8	$35.8						
1:3 Avg	$46.6	$37.3						

Other Assumptions:

- Additional pilot and non-pilot AD days and ID periods in Baseline and Pre-MOB years (no reduction to MILTECH civilian salary)
- During MOB, all unit personnel paid for 360 days (MILTECHs draw no civilian salary)
- One year MOB (make no assumption on how this is split between pre-deployment prep, BOG, and post-deployment leave/DeMOB)
- No increase in flying hours in pre-MOB year
- Flying hours in MOB year are same as AC (~12 hr/cr/mo)
- During MOB, non-AGRs receive full-time DHP benefits (at discounted rate, per CAPE analysis)
- No extra DHP benefits in 180 days before or after MOB (not currently authorized under 12304b)

AH-64 BNs are new costs under the COAs; UH-60 BN is a savings under some COAs—does not account for force structure offsets outside of aviation

Costs Associated with Forward Stationing versus Rotation

These are new costs under the alternative COAs—does not account for force structure offsets outside of aviation

- COA A Only:
  - Annual cost difference for permanently stationing one existing AH-64 BN in Korea: $9.0M to $13.0M
- All COAs:
  - Annual cost difference for permanently stationing one new HHC in Korea: $23.4M to $24.9M
- Issues:
  - Higher costs with forward stationing: PCS, BAH/OHA, and COLA costs
    - Included these in estimates above
  - Higher costs with rotation:
    - Net Family Separation Allowance, TDY Per Diem, and Household Goods/POV Storage for deploying soldiers
    - Did not explicilty included these in estimates above (hard to estimate)
  - Less certain: Base Ops and Indirect Support costs
    - Whether rotating or forward stationing units, Army must pay these costs in Korea
    - When units rotate to Korea, how much Base Ops and Indirect Support costs does the Army avoid that it would otherwise pay if the unit remained in CONUS?
      - Low end estimate assumes Army pays full CONUS Base Ops/Indirect Support costs when a unit deploys (so adding a forward stationed unit adds no additional cost)
      - High end estimate assumes Army pays no CONUS Base Ops/Indirect Support costs when a unit deploys (so adding a forward stationed unit means Army must now pay CONUS cost)
      - Used low end for overall costs estimates
        - Army probably does not pay full CONUS indirect support/base ops costs when a unit deploys, but pays much of the cost
        - Going with low end also implicitly attempts to account for FSA, Per Diem, and storage costs for deploying units, which are not explicitly calculated in estimates above

Cost to Deploy CAB HHC and AH-64 BN Personnel to Korea

- **Focuses on air transportation only; other costs in Forward Stationing v Rotation estimate**
- **Estimated costs to transport unit personnel from locations below to Korea**
  - **Miles and cost per mile from Army Contingency Operations model (DASA-CE)**

BDE	Unit	Home Station
1 AD AB	ARB/ARS	FT Bliss, TX
1 CD AB	ARB/ARS	FT Hood, TX
1 ID AB	ARB/ARS	FT Riley, KS
3 ID AB	ARB/ARS	Hunter AAF, GA
4 ID AB	ARB/ARS	FT Carson, CO
10 MTN AB	ARB/ARS	FT Drum, NY
82 ABN AB	ARB/ARS	FT Bragg, NC
101 AA AB	ARB/ARS	FT Campbell, KY
16 AB	ARB/ARS	JBLM, WA
25 ID AB	ARB ARS	FT Wainwright, AK Schofield Bks, HI

- **Assuming deployments between the above locations and Korea are equally likely:**

These are savings under the alternative COAs

		The following deployment policies:			
		BOG (No RIP/TOA)		BOG (1 Mo RIP/TOA)	
		12	9	12	9
		Result in the following average number of deployments per year			
		1.0	1.1	1.3	1.5
		And result in the following average personnel deployment costs (FY15 $M)			
	2 AH-64 BNs	$3.2	$4.3	$3.5	$4.8
COAs B & C →	HHC	$0.6	$0.8	$0.6	$0.9
COA A →	Combined	$3.8	$5.1	$4.1	$5.7

RAND

SDT Cost to Redistribute AH-64s Between AVN BDEs

- **Focuses only on costs to redistribute AC AH-64s**
  - **For other equipment, assumes sufficient quantities Army-wide to equip all units & Korea equipment set**
  - **May be additional costs associated with redistribution that are not included, e.g.:**
    - **Per diem, return travel, or other costs for: a) air crews conducting aircraft self-movement and 2) other personnel supporting configuration, loading, and in-transit care for sealift**
    - **Post self-deployment maintenance costs, more frequent phase maintenance, etc.**

- **Estimated costs to move AH-64s between the following locations**
  - **Distances and costs are from FORCES Cost Model (DASA-CE)**

BDE	Unit	Home Station
1 AD AB	ARB/ARS	FT Bliss, TX
1 CD AB	ARB/ARS	FT Hood, TX
1 ID AB	ARB/ARS	FT Riley, KS
3 ID AB	ARB/ARS	Hunter AAF, GA
4 ID AB	ARB/ARS	FT Carson, CO
10 MTN AB	ARB/ARS	FT Drum, NY
82 ABN AB	ARB/ARS	FT Bragg, NC
101 AA AB	ARB/ARS	FT Campbell, KY
16 AB	ARB/ARS	JBLM, WA
25 ID AB	ARB ARS	FT Wainwright, AK Schofield Bks, HI

Aircraft self-deploy between these locations

Aircraft self-deploy to/from SPOEs/SPODs, travel via sealift otherwise

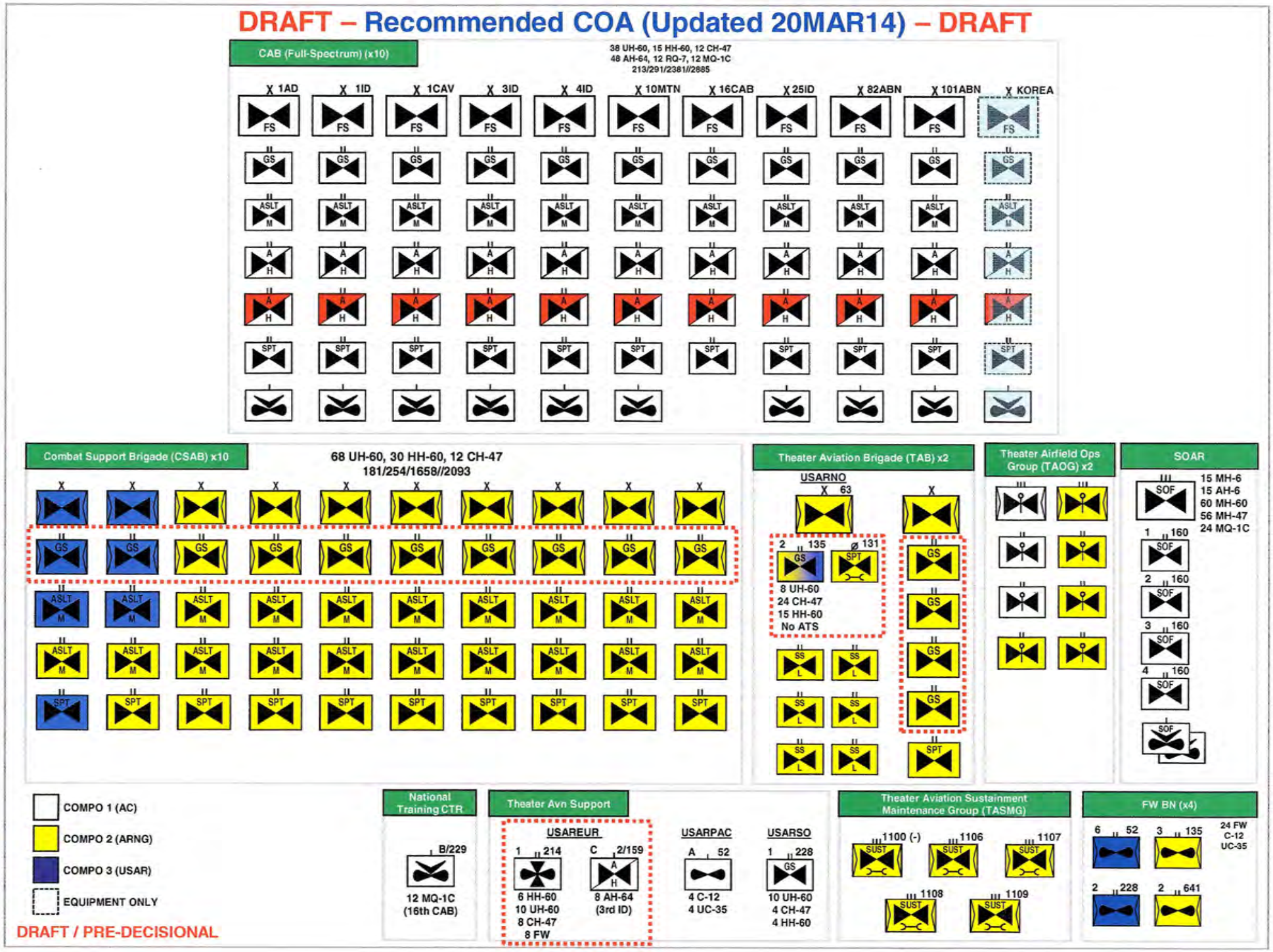
- **Assuming redistribution between all of the above locations is equally likely:**

These are new costs under the alternative COAs

The following deployment policies:			
BOG (No RIP/TOA)		BOG (1 Mo RIP/TOA)	
12	9	12	9
Result in the following average number of deployments per year			
1.0	1.1	1.3	1.5
And result in the following average SDT costs (FY15 $M)			
$1.9	$2.6	$2.1	$2.9

RAND

DRAFT – Recommended COA (Updated 20MAR14) – DRAFT



ARNG Full-Time Support

- Different sources give very different answers on authorized/on hand FTS
  - AH-64 BN AGRs are fairly consistent

	AH-64 BN	UH-60 BN
ARNG FTS RFI Assigned AGRs	25	28
ARNG FTS RFI Auth MILTECHs	156	71
DMDC Avg AGRs	24	26
DMDC Avg MILTECHs	107	99
FTS MCS (FY13) Auth AGRs	27	29
FTS MCS (FY13) Auth MILTECHs	156	69
CAPE Tiger Team AGRs	28	47
CAPE Tiger Team MILTECHs	156 (136 + 20)	50 (36 + 14)
FORCES AGRs	13	13
FORCES MILTECHs	17	16

Used this for costing

  - ARNG FTS RFI (data as of 30 Sep 2014)
    - In total, authorized and resourced/assigned MILTECHs are about same
    - Suggests authorized numbers are good proxies for number resourced/assigned at unit level
  - DMDC – Defense Manpower Data Center
    - unclear this data is useful for aligning MILTEChs to unit they support
  - FTS MCS – NGB's Full-Time Support Management Control System
  - CAPE Tiger Team – NGB submission on funded levels of FTS (Air + Ground MILTECHs)

COA Cost Estimates

Backups

Airframe Procurement Costs

Airframe	Source	M APUC	Year	FY15$
AH-64E New Build	SAR DEC 2013	$35.77	BY 10	$39.13
AH-64E Reman	SAR DEC 2013	$15.91	BY 10	$17.41
CH-47F	SAR DEC 2013	$22.69	BY 05	$27.27
UH-60 A to L	1991 MAR SAR Summary Table	$6.03	BY 91	$9.17
UH-60 L toV	Ver 4 UH 60 L digital ACP to CRB	$2.82	BY 14	$2.87
UH-60M	SAR DEC 2013	$16.00	BY 05	$19.23
UH-72	SAR DEC 2012	$5.30	BY 06	$6.20

The APUC was used where possible because it better reflects current outlays
The UH-60 A to L conversion cost came from the summary versus an individual SAR
The UH-60 L to V conversions have not started.
The estimate used is the most recent available

COA Cost Estimates

2 AHBs from ARNG	Best Case			Worst Case		
FY-15 M	COA A	COA B	COA C	COA A	COA B	COA C
Force Structure	$140.79	$380.5	$620.1	$140.8	$380.5	$620.1
Korea Posture	$88.8	$32.2	$32.2	$88.8	$32.2	$32.2
Recurring Total	**$229.54**	**$412.7**	**$652.4**	**$229.5**	**$412.7**	**$652.4**
Procurement	($172.0)	($642.5)	($538.1)	($172.0)	($121.1)	$113.7

3 AHBs from ARNG	Best Case			Worst Case		
FY-15 M	COA A	COA B	COA C	COA A	COA B	COA C
Force Structure	$91.35	$331.0	$570.7	$91.3	$331.0	$570.7
Korea Posture	$88.8	$32.2	$32.2	$88.8	$32.2	$32.2
Recurring Total	**$180.10**	**$363.3**	**$602.9**	**$180.1**	**$363.3**	**$602.9**
Procurement	($258.1)	($728.5)	($624.1)	($258.1)	($207.1)	$27.7

Displaying 5 year O&S costs versus the annual cost in previous charts

COA Cost Estimates

2 AHBs from ARNG	Best Case			Worst Case		
Force Structure	**COA A**	**COA B**	**COA C**	**COA A**	**COA B**	**COA C**
(-) Force Structure Delta created by removing 3 AHBs and Adding ARBs	($1)	($23)	($46)	($1)	($23)	($46)
(+) Force Structure Delta created by removing 3 AHBs and Adding 2 ARBs	$71	$141	$212	$71	$141	$212
(+) Force structure cost increase (2 NG ARB)	($42)	($42)	($42)	($42)	($42)	($42)
(-) Force Structure cost decrease (3 NG AHB)	$0	$0	$0	$0	$0	$0
Korea Posture	**COA A**	**COA B**	**COA C**	**COA A**	**COA B**	**COA C**
(+) Costs associated with basing /forward stationing 2 ARB/H-ARS & CAB HQ	$40	$25	$25	$40	$25	$25
(-) Cost to rotate CONUS-based CAB(-AH64 and CAB HQ) personnel to Korea	($5)	($1)	($1)	($5)	($1)	($1)
Force Structure Offset savings for creation of 11th CAB HHC	($18)	($18)	($18)	($18)	($18)	($18)
Procurement	**COA A**	**COA B**	**COA C**	**COA A**	**COA B**	**COA C**
(+) AH64 acquisition increase	$0	$418	$522	$0	$939	$1,174
(-) 53 UH60 (8 Reman, 45 Ms) acquisition decrease	$0	($888)	($888)	$0	($888)	($888)
(-) 90 NG UH60 (L to V) acquisition decrease	($172)	($172)	($172)	($172)	($172)	($172)

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COA Cost Estimates

3 AHBs from ARNG	Best Case				Worst Case		
Force Structure	**COA A**	**COA B**	**COA C**		**COA A**	**COA B**	**COA C**
(-) Force Structure Delta created by removing 3 AHBs and Adding ARBs	$0	($12)	($35)		$0	($12)	($35)
(+) Force Structure Delta created by removing 3 AHBs and Adding 2 ARBs	$10	$0	$0		$10	$0	$0
(+) Force structure cost increase (2 NG ARB)	$71	$141	$212		$71	$141	$212
(-) Force Structure cost decrease (3 NG AHB)	($62)	($62)	($62)		($62)	($62)	($62)
Korea Posture	**COA A**	**COA B**	**COA C**		**COA A**	**COA B**	**COA C**
(+) Costs associated with basing /forward stationing 2 ARB/H-ARS & CAB HQ	$40	$25	$25		$40	$25	$25
(-) Cost to rotate CONUS-based CAB(-AH64 and CAB HQ) personnel to Korea	($5)	($1)	($1)		($5)	($1)	($1)
Cost offset for 11th CAB HHC	($18)	($18)	($18)		($18)	($18)	($18)
Procurement	**COA A**	**COA B**	**COA C**		**COA A**	**COA B**	**COA C**
(+) AH64 acquisition increase	$0	$418	$522		$0	$939	$1,174
(-) 53 UH60 (8 Reman, 45 Ms) acquisition decrease	$0	($888)	($888)		$0	($888)	($888)
(-) 90 NG UH60 (L to V) acquisition decrease	($258)	($258)	($258)		($258)	($258)	($258)

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