



Chapter 6
Regional Plan

6.0 REGIONAL PLAN

6.1 Introduction

In the previous Chapters 3-5, the aviation related assets and needs assessment for each of the individual aviation activities within the Mid-Atlantic Region were identified. A Development Plan was presented for each activity that identified future aviation needs and accommodated these needs within each individual installation. In this Chapter, a Regional Concept and Development Plan will be presented which will identify aviation operational opportunities that capitalize on use of existing aviation infrastructure while maintaining or enhancing operational readiness and maximizing costs savings where possible.

6.2 Regional Hangar Utilization

As discussed in Section 3.6.21 of Chapter 3, the future needs of Chambers Field will result in a requirement for an additional five (5) modules of aircraft maintenance hangars to support future operational fleet squadrons. In addition, NADEP detachment Oceana will require three (3) additional O/H (high-bay hangar space) modules and one (1) additional 01/02 (shop/administrative space) module for future ISR and IMC maintenance requirements associated with the E-2C, C-2A, and MH-60S aircraft. In the future, it is projected that NAS Oceana could have excess capacity of approximately two (2) O/H (high-bay hangar space) modules but less than one (1) 01/02 (shop/administrative space) module. As discussed in previous Chapters, this discrepancy is caused by the fact that NAS Oceana has hangars that were constructed prior to the aircraft maintenance hangar module concept. Unlike Chambers Field, the NADEP Jacksonville detachment Oceana ISR and IMC future maintenance requirements associated with the F/A-18 “Hornet” and F/A-18 “Super Hornet” have been accounted for in existing facilities.

6.2.1 Regional Opportunities

6.2.1.1 Fleet Logistics Support Squadron VR-56

A review of Regional aircraft maintenance hangar assets indicates a potential opportunity at NAS Oceana to satisfy the requirement to hangar the C-40A aircraft projected to replace the C-9 aircraft currently utilized by VR-56 at Chambers Field. As discussed in Section 3.6.2.1 of Chapter 3, a feasibility study concluded that two (2) options existed at Chambers Field to support the new aircraft. The first recommendation was to provide a “dog house” in the existing Hangar LP33 administrative and shop areas. This recommendation would degrade operations by requiring a nose wheel dolly to get the aircraft positioned in the hangar. Executing this recommendation would also require the squadron lose a portion of the existing shop and offices spaces in LP33 as well as require an extended period of disruption to operations to perform the facility alterations. Due to these reasons, this recommendation is not seen as feasible for future VR-56 requirements. The second recommendation was to construct a new Type II aircraft maintenance hangar at Chambers Field. This is seen as the only feasible solution to maintain and enhance current VR-56 operations at Chambers Field.

Due to its interior dimensions and configuration, Hangar 200 at NAS Oceana could be altered to hangar one (1) C-40A (See Figures 6-1, 6-2 and 6-3). Moving VR-56 to NAS Oceana would not adversely impact squadron operations and would generate a potential facility savings of approximately \$ 14.6 million. The existing clear door height is 40 feet, the interior usable height is 42 feet, the interior usable depth is 240 feet, and the interior usable width is 150 feet. It should be noted that Hangar 200 has two (2) hangar bays and the dimension mentioned above are per hangar bay. Relocation of VR-56 would contribute to increased productivity. The Operations Department of VR-56 reviewed first quarter Fiscal Year 2003 lift requirement data. The data showed that approximately one-half to two-thirds of all lifts originating in the Norfolk area were homeported at NAS Oceana. A large number of the remaining missions had lifts that did not originate at NAS Oceana or Chambers Field. In addition, the runway configuration (layout and length) at NAS Oceana would have a positive impact on maximum takeoff gross weight (MTOW) utilizing the Jeppesen Navy Ops Data. During the summer season maximum gross weight for takeoff must be reduced significantly when the temperature rises above 86 degrees Fahrenheit. Oceana’s shortest runway is 8,000’ and the longest runway is 12,000’. Chambers Field has a single 8,000’ runway. Due to enhanced operations and projected facility savings generated by not having to construct a new Type II hangar at Chambers Field, it is recommended that VR-56 relocate from Hangar

LP33 at Chambers Field to Hangar 200 at NAS Oceana some time prior to the transition from the C-9 aircraft to the C-40A aircraft but no later than 2007 because the additional hangar space made available at Chambers Field will be required to support the new MH-60S squadrons. Once VR-56 has relocated to NAS Oceana, it is further recommended that MAG-42 det. B relocate from LF60 to LP33 and the new MH-60S expeditionary squadron locate in LF60 at Chambers Field. Relocating MAG-42 det. B to LP33 will mix fixed wing and rotary-wing operations in the LP (North) area. MAG-42 det. B was chosen as the proposed user because they are a reserve squadron with limited operations during the week. They were also chosen so that the new MH-60S expeditionary squadron could be located in LF60 next to LF59 which is proposed to house the other two MH-60S expeditionary squadrons. See Tables 6-1 and 6-2 for the proposed hangar plan for Chambers Field and NAS Oceana respectively with VR-56 relocation to NAS Oceana.

Table 6-1 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	Deployed
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	LP21
VR-56	LP33	Oceana
HCS-4	SP35	SP35
MAG-42, Det. B	LF60	LP33
HC-new	NR	LF60
CV-1	NR	New
CV-2	NR	New
CV-3	NR	New
CV-4	NR	New
CV-5	NR	Deployed
Station	LP33	LP33
NADEP JAX	LP167	New

Table 6-2 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
	STRKFITWING	STRKFITWING
145	VFA-37	VFA-37
	VFA-105	VFA-34
137	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
		VFA-15
404	VF-101	VF(A)-11
	VF-11	VF(A)-32
		VFA-105
500	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

6.2.1.2 Increase Hangar Capacities

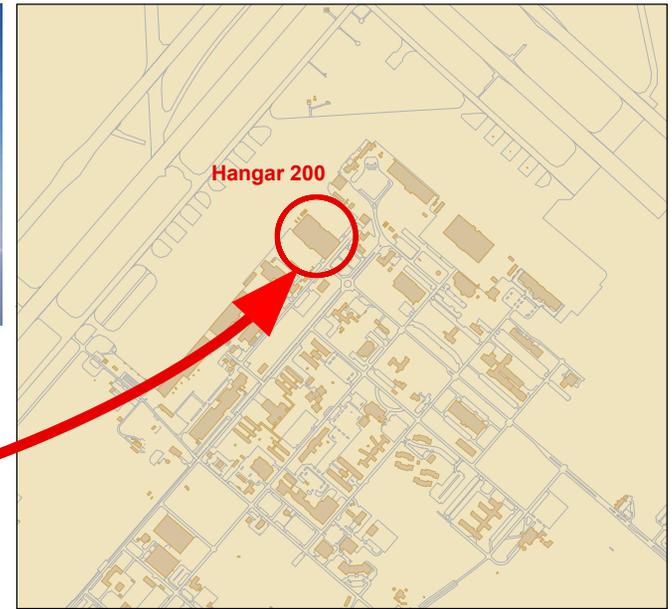
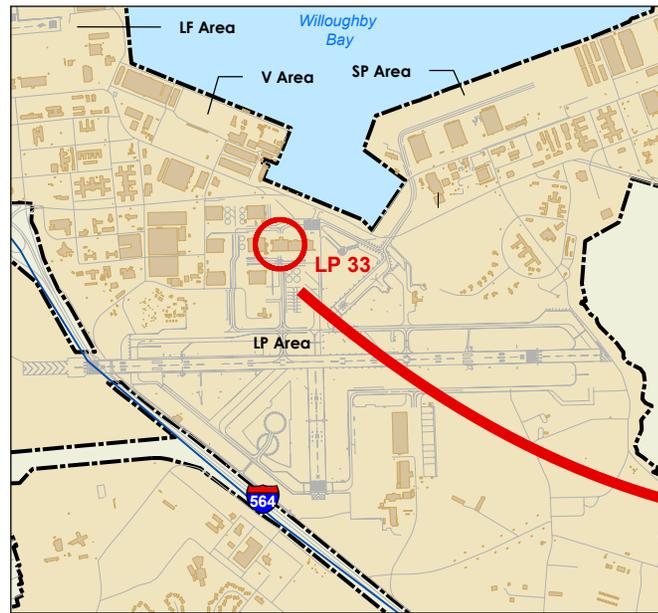
A review of Regional aircraft maintenance hangar assets indicates a potential opportunity at NAS Oceana to increase the capacity of at least two (2) hangars by the equivalent of one (1) Type I module each. As discussed in Chapter 2, Section 2.5.1.4.1 Aircraft Maintenance Hangars, most of the older hangars within the Region, primarily those at NAS Oceana, were built before the modular hangar concept. When analyzing the NAS Oceana hangars it is somewhat difficult to equate these older hangars to current hangar criteria. However, based on their configurations, the existing O/H (bay-high area) space in Hangars 500 and 111 are capable of supporting one (1) additional typical aircraft carrier-based operational squadron each with the addition of 01 (organizational-level shop) and 02 (administrative) space. Hangar 500 would require 9,800 SF of 01 space and 22,602 SF of 02 spaces to increase the hangar capacity to a full five (5) modules of Type I aircraft maintenance hangar. The approximate cost would be \$7.3 million. Hangar 111 would require 14,842 SF of 01 space and 7,618 SF of 02 spaces to increase the hangar capacity to four (4) modules of Type I aircraft maintenance hangar. The approximate cost would be \$ 5.1 million. It should be noted that for either case, the cost is substantially less than the cost of a Type I hangar. This may represent a future opportunity to increase Regional Type I hangar capacity without constructing a stand-alone hangar. The potential cost savings could be as much as \$11.2 million.

6.3 Factors That May Impact Future Mid-Atlantic Region Aircraft Maintenance Hangar Requirements

This section discusses several factors that may impact future aircraft maintenance hangar requirements as well as future hangar utilization within the Mid-Atlantic Region. As events warrant, aircraft maintenance hangar requirements and utilization plans should be reviewed and updated. At the end of this Section, several scenarios are presented to allow Regional aviation decision makers to see a complete picture of potential changes and how they may affect future needs. All of the scenarios assume that the recommendation to relocate VR-56 from Chambers Field to NAS Oceana will be implemented.

Figure 6-1
Regional Changes

NS Norfolk



Relocate Fleet Logistics
Support Squadron VR-56
from Chambers Field to NAS Oceana

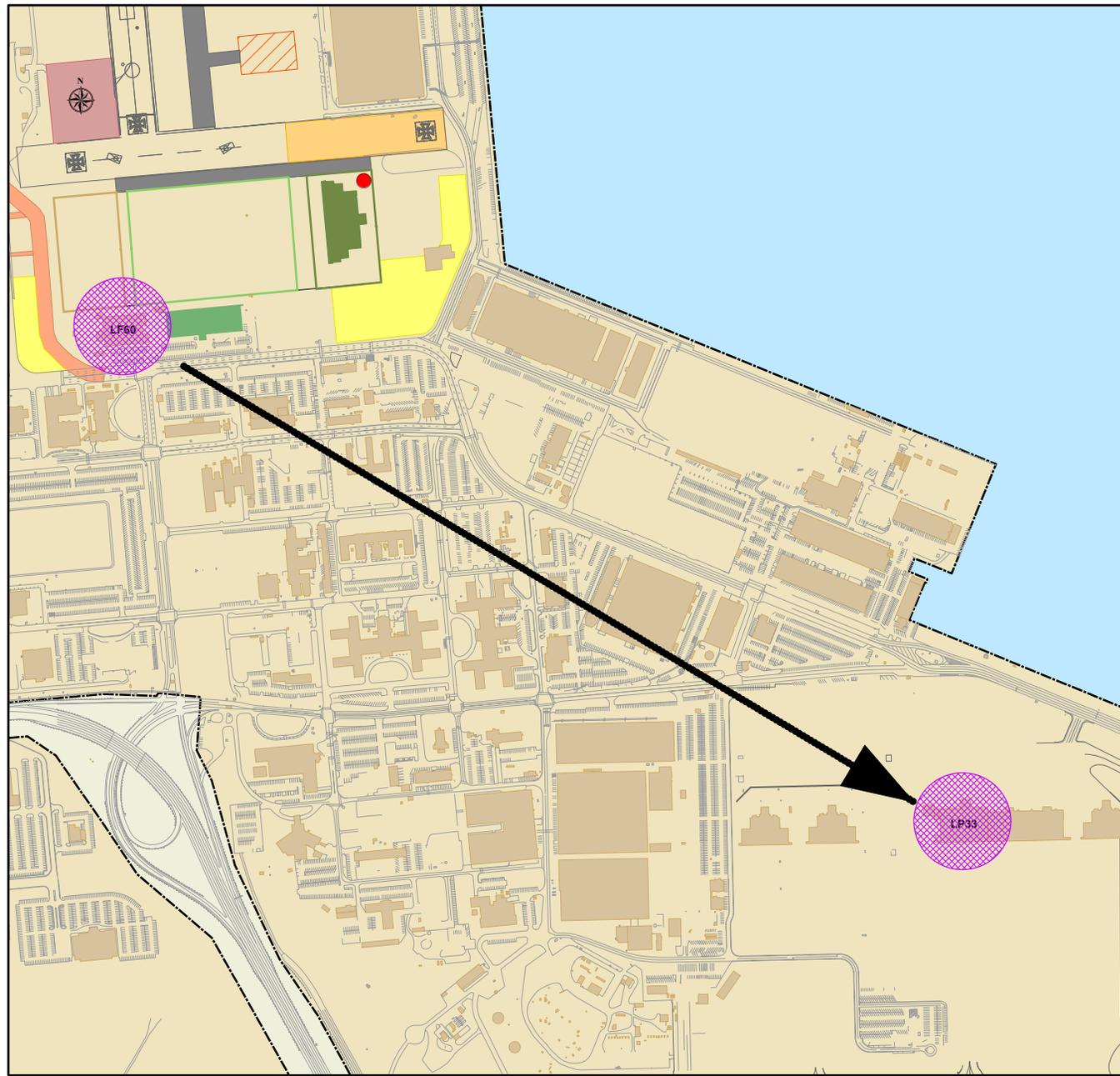
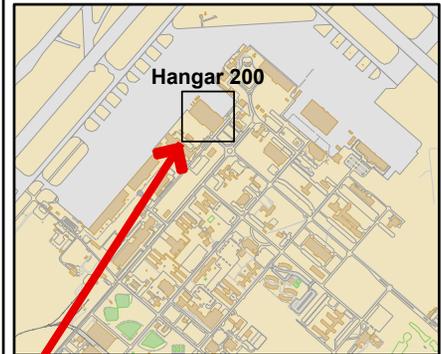
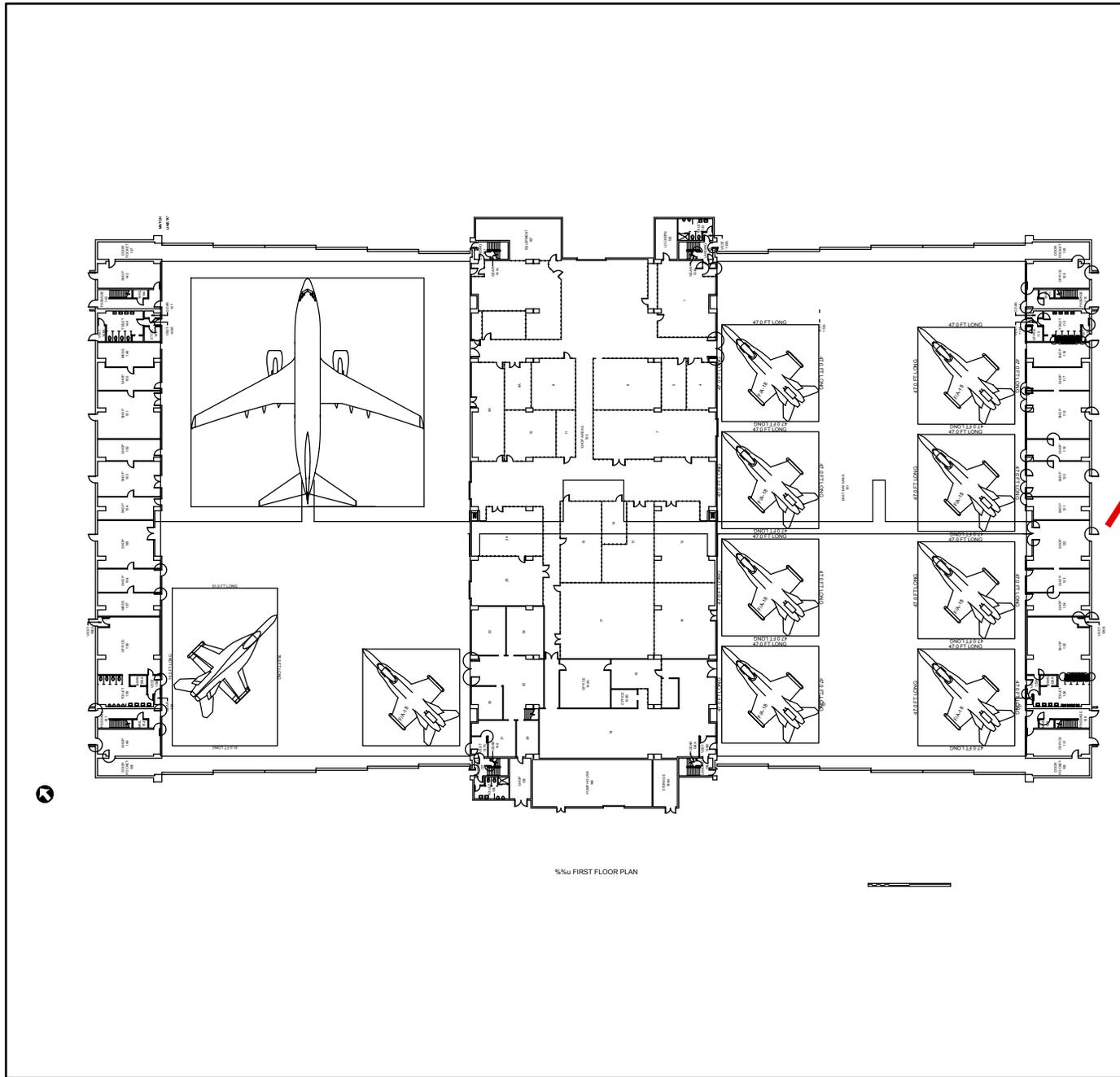


Figure 6-2
Chambers Field
Proposed Squadron
Relocation

- Move MAG 42 from LF 60 to LP 33
- Move "new" MH-60S EXP Squadron to LF60



Figure 6-3
NAS Oceana Hangar 200
Proposed Utilization



6.3.1 Fleet Response Plan

Recent United States responses to emerging world situations demonstrate a concentrated, short-term increase in military traffic, not only Navy aircraft. As an example, in addition to mobilization of six aircraft carriers in response to Operation Iraqi Freedom, five (5) Amphibious Readiness Groups (ARGs) also deployed. Preparations for deployment of these ARGs resulted in increased aircraft sorties and congestion around Marine Corps Air Stations. Air Mobility Command logistics air missions also increased significantly at Navy and Marine Corps air facilities during surge preparation.

The rapidly changing strategic environment emerging from the global war on terrorism and the campaigns in Afghanistan and Iraq requires naval forces that can deliver persistent, credible combat power through both rotational deployments and surge readiness. In May 2003, the Navy developed a new inter-deployment readiness profile, the "Fleet Response Concept" (FRC) that will improve the Navy's speed of response to world events. The FRC is currently being developed into the Fleet Response Plan (FRP). When implemented, the FRP will modify current ship and squadron operating cycles by adjusting maintenance intervals, along with training and manpower processes, to increase unit availability for surge operations -- that is, building the long-term institutional capability to support rapid, massive build-up in deployed Naval forces.

The FRP will reapportion existing assets and funding to prepare Naval forces in a more efficient manner while allowing greater flexibility for surge operations. As currently envisioned, FRP will be implemented with no increase in force structure and with little or no additional operational funding.

Once FRP is implemented, the typical deployment cycles will be altered such that all East Coast aircraft carrier air wings could be at their respective homebases at the same time. The current assumption to "hot rack" single-sited airframes in the Mid-Atlantic Region will no longer be valid.

6.3.1.1 NAVSTA Norfolk Chambers Field

Implementation of FRP will impact Chambers Field since both the E-2C and MH-60S CV squadrons will be single-sited there -- that is, all East Coast aircraft carrier airwing E-2C squadrons and MH-60S squadrons will be located at Chambers Field. Current and projected requirements presented in Section 3.6.2 of Chapter 3 assume one (1) E-2C operation squadron is always deployed today and will be in the future. Also, it was assumed that one (1) MH-60S CV operational squadron would always be deployed in the future. Implementation of FRP would increase the Chambers Field hangar requirements by one and one-half (1 ½) Type I hangar modules. The approximate cost of a single Type I hangar modules is approximately \$ 11.8 million. See Table 6-3 for current and projected Chambers Field hangar requirements with the future implementation of FRP and Table 6-4 for a comparison of Chambers Field future requirements with and without FRP.

Table 6-3 Current and Projected Chambers Field Hangar Requirements with Future Implementation of FRP

Permanent Party		2003 Hangar Requirements						2015 Hangar Requirements					
Squadron	Type of Aircraft	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
			O/H	OS					O/H	OS			
		HC-6	MH-60S	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968
HC-8	MH-60S H-46	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
HC-2	H-3 MH-60S	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
HM-14	MH-53	II	1.0	1.0	28,560	13,886	12,080	II	1.0	1.0	28,560	13,886	12,080
VAW-120	E-2C C-2A	I	1.5	1.5	29,952	14,871	13,040	I	1.5	1.5	29,952	14,871	13,040
VAW-121	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VAW-123	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VAW-124	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VAW-125	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VAW-126	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VRC-40	C-2A	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VAW-78	E-2C	I	0.5	0.5	9,984	6,518	5,640	I	0.5	0.5	9,984	6,518	5,640
VR-56	C-9 C-40A	II	1.0	1.0	28,560	13,886	12,080	Relocated to NAS Oceana					
HCS-4	HH-60H	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
MAG-42, Det. B	CH-46	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
HC-new	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
CV-1	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
CV-2	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
CV-3	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
CV-4	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
CV-5	MH-60S	-	-	-	-	-	-	I	1.0	1.0	19,968	10,526	8,720
Station	C-12	I	0.25	0.25	4,992	2,632	2,180	I	0.25	0.25	4,992	2,632	2,180
NADEP JAX	E-2C C-2A MH-60S	I	2.0	1.0	39,936	19,745	-	I	5.0	2.0	99,840	38,525	-
NAVSTA Norfolk (Chambers Field) Subtotals		I	12.75	11.75	254,592	139,512	101,380	I	21.75	18.75	434,304	221,448	153,700
Less (-) deployed squadron(s)		II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
		I	-0.5	-0.5	-9,984	-6,518	-5,640	I	0	0	0	0	0
		II	0	0	0	0	0	II	0	0	0	0	0
NAVSTA Norfolk (Chambers Field) Total		I	12.25	11.25	244,608	132,994	95,740	I	21.75	18.25	434,304	221,448	153,700
		II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080

Table 6-4 Comparison of Current and Projected Chambers Field Hangar Requirements with and without Future Implementation of FRP

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total without FRP	I	11.75	10.75	244,608	132,994	95,740	I	20.25	17.25	404,352	204,404	139,340
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAVSTA Norfolk (Chambers Field) Total with FRP	I	11.75	10.75	244,608	132,994	95,740	I	21.75	18.75	434,304	221,448	153,700
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAVSTA Norfolk (Chambers Field) Difference	I	0	0	0	0	0	I	+ 1.5	+ 1.5	+ 29,952	+ 17,044	+ 14,360
	II	0	0	0	0	0	II	0	0	0	0	0

6.3.1.2 NAS Oceana

Implementation of FRP will not impact NAS Oceana since East Coast aircraft carrier airwing F/A-18 “Hornet” squadrons are currently split-sited with two (2) operational squadrons located at MCAS Beaufort in South Carolina. The East Coast aircraft carrier airwing F/A-18 “Super Hornet” squadrons are projected to be split-sited in accordance with the recent Record of Decision (ROD) with two (2) operational squadrons located at MCAS Cherry Point in North Carolina. See Table 6-5 for current and projected NAS Oceana hangar requirements with the future implementation of FRP.

Table 6-5 Current and Projected NAS Oceana Hangar Requirements with Future Implementation of FRP

Permanent Party		2003 Hangar Requirements						2015 Hangar Requirements					
Squadron	Type of Aircraft	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
			O/H	OS					O/H	OS			
VF-101	F-14A F-14B F-14D	I	2.0	2.5	39,936	28,084	20,328	-	-	-	-	-	-
VF(A)-11	F-14B F/A-18E	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VF-31	F-14D	I	1.0	1.0	19,968	10,526	8,720	-	-	-	-	-	-
VF(A)-32	F-14B F/A-18F	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VF(A)-103	F-14B F/A-18F	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VF(A)-143	F-14B F/A-18F	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VF(A)-211	F-14A F/A-18F	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VF(A)-213	F-14D F/A-18F	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
CSFWL	T-34	I	0.5	0.25	9,984	2,632	2,180	I	0.5	0.25	9,984	2,632	2,180
VFA-106	F/A-18 B,C, D F/A-18 E, F	I	2.0	2.0	39,936	23,239	14,608	I	3.0	3.5	59,904	40,929	27,673
VFA-15	F/A-18C F/A-18E	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VFA-34	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFA-37	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFA-81	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	-	-	-	-	-	-
VFA-83	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFA-87	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFA-105	F/A-18C F/A-18E	I -	1.0 -	1.0 -	19,968 -	10,526 -	8,720 -	- I	- 1.0	- 1.0	- 19,968	- 10,526	- 8,720
VFA-131	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFA-136	F/A-18C	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VFC-12	F/A-18 A, B	I	1.0	1.0	19,968	10,526	8,720	I	1.0	1.0	19,968	10,526	8,720
VR-56	C-9, C-40A	Located at NAVSTA Norfolk (Chamber Field)						II	1.0	1.0	28,560	13,886	12,080
Station	H-3 MH-60S	I -	0.5 -	0.25 -	9,984 -	2,632 -	2,180 -	- I	- 0.5	- 0.25	- 9,984	- 2,632	- 2,180
NADEP JAX	F/A-18 A,B,C, D F/A-18 E/F	I	1.0	1.0	19,968	20,478	-	I	3.0	1.0	59,904	20,478	-
NAS Oceana Subtotals		I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
		II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Less (-) deployed squadron(s)		I	0	0	0	0	0	I	0	0	0	0	0
		II	0	0	0	0	0	II	0	0	0	0	0
NAS Oceana Totals		I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
		II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080

Table 6-6 Summary of Hangar Requirements with FRP

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 1	I	11.75	10.75	244,608	132,994	95,740	I	21.75	18.75	434,304	221,448	153,700
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 1	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 1	I	34.75	33.75	703,872	389,001	283,276	I	43.75	38.75	873,600	446,009	316,533
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

6.3.2 Naval Reserve Fleet Integration Plan

A Plan is currently under development that will map a strategy to incorporate the existing Navy reserve squadrons, both fixed and rotary wing, into the active force structure. The final Plan and its recommendations could impact aviation facilities in the Mid-Atlantic Region. Both Chambers Field and NAS Oceana have reserve squadrons. It should be noted that the reserve squadron at NAS Oceana, VFC-12, is also the Naval Reserve’s premier adversary squadron. Therefore, it is less likely the Reserve Fleet Integration Plan would impact NAS Oceana. The Naval reserve squadrons at Chambers Field that could, at some point in the future, be impacted by the Naval Reserve Fleet Integration Plan are HCS-4 and VAW-78. VR-56 is also a naval reserve squadron currently located at Chambers Field, but due to the nature of its mission, it is unlikely that the Integration Plan would affect this squadron. Should, at some point in the future, HCS-4 and/or VAW-78 be disestablished or relocated to another installation outside the Mid-Atlantic Region additional aircraft maintenance hangar spaces could become available. HCS-4 and VAW-78 currently occupy one (1) module and one-half (1/2) module respectively of Type I aircraft maintenance hangar at Chambers Field.

6.3.3 Transition of Marine Helicopter Squadrons to MV-22 Aircraft

The MV-22 Osprey tiltrotor aircraft is a revolutionary, vertical/short takeoff and landing (V/STOL), multi-purpose tactical aircraft that will replace the current fleet of Marine Corps Vietnam-era CH-46 and CH-53 aircraft. The Marine Corps will employ a phased strategy for the transition of the Marine Corps Medium Lift fleet to the MV-22 aircraft. Twenty-two (22) CH-46 and CH-53 squadrons are scheduled to transition to the MV-22 aircraft. Eighteen (18) of the squadrons are active duty squadrons and four (4) are reserve squadrons. One of the reserve squadrons scheduled to transition to the MV-22 is Helicopter Marine Medium Squadron HMM-774 (part of MAG-42, det. B) currently located at Chambers Field. Should, at some point in the future, MAG-42, det. B be relocated to another installation outside the Mid-Atlantic Region additional aircraft maintenance hangar space could become available. MAG-42, det. B currently occupies one (1) module of Type I aircraft maintenance hangar at Chambers Field.

6.4 Future Hangar Needs

The following represents various aviation scenarios within the Mid-Atlantic Region that could impact future aircraft maintenance hangar needs.

Scenario 1 – Future Implementation of FRP

Table 6-7 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 1)

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	New
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	LP21
VR-56	LP33	Oceana
HCS-4	SP35	SP35
MAG-42, Det. B	LF60	LP33
HC-new	NR	LF60
CV-1	NR	New
CV-2	NR	New
CV-3	NR	New
CV-4	NR	New
CV-5	NR	New
Station	LP33	LP33
NADEP JAX	LP167	New

Table 6-8 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 1)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
	STRKFITWING	STRKFITWING
145	VFA-37	VFA-37
	VFA-105	VFA-34
137	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
404		VFA-15
	VF-101	VF(A)-11
	VF-11	VF(A)-32
500		VFA-105
	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-9 Scenario 1 Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field)	I	11.75	10.75	244,608	132,994	95,740	I	21.75	18.75	434,304	221,448	153,700
Total Scenario 1	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
Scenario 1	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 1	I	34.75	33.75	703,872	389,001	283,276	I	43.75	38.75	873,600	446,009	316,533
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 1):

- 5 ½ Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 2a – Realignment of Naval Air Reserve Forces (VAW-78 and HCS-4 disestablished) without FRP

Table 6-10 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 2a)

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21 (1)
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	LP33
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	New
CV-3	NR	New
CV-4	NR	New
CV-5	NR	Deployed
Station	LP33	LP33
NADEP JAX	LP167	New

Note: (1) VAW-78 currently occupies one-half of a Type I module of hangar space in LP21. The only suitable squadron to backfill the VAW-78 spaces would be an operational VAW Fleet squadron.

Table 6-11 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 2a)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
145	STRKFITWING	STRKFITWING
	VFA-37	VFA-37
137	VFA-105	VFA-34
	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
404		VFA-15
	VF-101	VF(A)-11
	VF-11	VF(A)-32
500		VFA-105
	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-12 Scenario 2a Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 2a	I	11.75	10.75	244,608	132,994	95,740	I	18.75	15.75	374,400	187,360	124,980
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 2a	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 2a	I	34.75	33.75	703,872	389,001	283,276	I	40.75	35.75	813,696	411,921	287,813
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 2a):

- 3 Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 2b – Realignment of Naval Air Reserve Forces (VAW-78 and HCS-4 disestablished) with FRP

Table 6-13 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 2b)

Squadron	Location Facility Number	
	2003	2015
	HC-6	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	LP33
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	New
CV-3	NR	New
CV-4	NR	New
CV-5	NR	New
Station	LP33	LP33
NADEP JAX	LP167	New

Note: (1) VAW-78 currently occupies on-half of a Type I module of hangar space in LP21. The only suitable squadron to backfill the VAW-78 spaces would be an operational VAW Fleet squadron.

Table 6-14 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 2b)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
145	STRKFITWING	STRKFITWING
	VFA-37	VFA-37
137	VFA-105	VFA-34
	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
		VFA-15
404	VF-101	VF(A)-11
	VF-11	VF(A)-32
		VFA-105
500	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-15 Scenario 2b Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 2b	I	11.75	10.75	244,608	132,994	95,740	I	20.25	17.25	404,352	204,404	139,340
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 2b	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 2b	I	34.75	33.75	703,872	389,001	283,276	I	42.25	37.25	843,648	428,965	302,173
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 2b):

- 4 Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 3a – Realignment of Naval Air Reserve Forces (VAW-78 and HCS-4 disestablished) and MAG-42 det. B relocated outside Mid-Atlantic Region without FRP

Table 6-16 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 3a)

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21 (1)
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	Relocated from Chambers Field
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	LP33
CV-3	NR	New
CV-4	NR	New
CV-5	NR	Deployed
Station	LP33	LP33
NADEP JAX	LP167	New

Note: (1) VAW-78 currently occupies on-half of a Type I module of hangar space in LP21. The only suitable squadron to backfill the VAW-78 spaces would be an operational VAW Fleet squadron.

Table 6-17 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 3a)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
145	STRKFITWING	STRKFITWING
	VFA-37	VFA-37
137	VFA-105	VFA-34
	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
		VFA-15
404	VF-101	VF(A)-11
	VF-11	VF(A)-32
500		VFA-105
	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-18 Scenario 3a Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 3a	I	11.75	10.75	244,608	132,994	95,740	I	17.75	14.75	354,432	176,834	116,260
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 3a	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 3a	I	34.75	33.75	703,872	389,001	283,276	I	39.75	34.75	793,728	401,395	279,093
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 3a):

- 2 Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 3b – Realignment of Naval Air Reserve Forces (VAW-78 and HCS-4 disestablished) and MAG-42 det. B relocated outside Mid-Atlantic Region with FRP

Table 6-19 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 3b)

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	Relocated from Chambers Field
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	LP33
CV-3	NR	New
CV-4	NR	New
CV-5	NR	New
Station	LP33	LP33
NADEP JAX	LP167	New

Note: (1) VAW-78 currently occupies on-half of a Type I module of hangar space in LP21. The only suitable squadron to backfill the VAW-78 spaces would be an operational VAW Fleet squadron.

Table 6-20 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 3b)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
145	STRKFITWING	STRKFITWING
	VFA-37	VFA-37
	VFA-105	VFA-34
137	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
		VFA-15
404	VF-101	VF(A)-11
	VF-11	VF(A)-32
		VFA-105
500	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-21 Scenario 3b Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 3b	I	11.75	10.75	244,608	132,994	95,740	I	19.25	16.25	384,384	193,878	130,620
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 3b	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 3b	I	34.75	33.75	703,872	389,001	283,276	I	41.25	36.25	823,680	418,439	293,453
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 3b):

- 3 Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 4a – MAG-42 det. B relocated outside Mid-Atlantic Region without FRP

Table 6-22 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 4a)

Squadron	Location Facility Number	
	2003	2015
	HC-6	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	Relocated from Chambers Field
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	LP33
CV-3	NR	New
CV-4	NR	New
CV-5	NR	New
Station	LP33	LP33
NADEP JAX	LP167	New

Table 6-23 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 4a)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
	STRKFITWING	STRKFITWING
145	VFA-37	VFA-37
	VFA-105	VFA-34
137	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
		VFA-15
404	VF-101	VF(A)-11
	VF-11	VF(A)-32
		VFA-105
500	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-24 Scenario 4a Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 4a	I	11.75	10.75	244,608	132,994	95,740	I	19.25	16.25	384,384	193,878	130,620
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 4a	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 4a	I	34.75	33.75	703,872	389,001	283,276	I	41.25	36.25	823,680	418,439	293,453
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 4a):

- 3 Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Scenario 4b – MAG-42 det. B relocated outside Mid-Atlantic Region with FRP

Table 6-25 Permanent Party Current and Projected Hangar Utilization Plan for Chambers Field (Scenario 4b)

Squadron	Location Facility Number	
	2003	2015
HC-6	LF59	LF59
HC-8	LF59	LF59
HC-2	SP35	SP35
HM-14	SPxx	SPxx
VAW-120	LP34	LP34
VAW-121	LP34	LP34
VAW-123	Deployed	LP21
VAW-124	LP21	LP21
VAW-125	LP27	LP27
VAW-126	LP27	LP27
VRC-40	LP48	LP48
VAW-78	LP21	Disestablished
VR-56	LP33	Oceana
HCS-4	SP35	Disestablished
MAG-42, Det. B	LF60	Relocated from Chambers Field
HC-new	NR	LF60
CV-1	NR	SP35
CV-2	NR	LP33
CV-3	NR	New
CV-4	NR	New
CV-5	NR	New
Station	LP33	LP33
NADEP JAX	LP167	New

Table 6-26 Permanent Party Current and Projected Hangar Utilization Plan for NAS Oceana (Scenario 4b)

Facility Number	Squadron(s)	
	2003	2015
23	Station H-3	Station MH-60S
111	VFA-34	VFA-83
	VFA-81	VFA-131
	VFA-83	VFA-136
	VFA-131	
	VFA-136	
122	VFA-106	VFA-106
	VFA-15	VFA-87
	VFA-87	NADEP IMC F/A-18 "Hornet"
	NADEP IMC F/A-18 "Hornet"	
145	STRKFITWING	STRKFITWING
	VFA-37	VFA-37
	VFA-105	VFA-34
137	CSFWL T-34	CSFWL T-34
200	VFC-12	VFC-12
	VF-211	VR-56
404		VFA-15
	VF-101	VF(A)-11
	VF-11	VF(A)-32
500		VFA-105
	VF-31	VF(A)-103
	VF-32	VF(A)-143
	VF-103	VF(A)-211
	VF-143	VF(A)-213
	VF-213	

Table 6-27 Scenario 4b Summary of Hangar Requirements

	2003 Hangar Requirements						2015 Hangar Requirements					
	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)	Type	Modules		O/H (211-05)	01 (211-06)	02 (211-07)
		O/H	OS					O/H	OS			
NAVSTA Norfolk (Chambers Field) Total Scenario 4b	I	11.75	10.75	244,608	132,994	95,740	I	20.75	17.75	414,336	210,922	144,980
	II	2.0	2.0	57,120	27,772	24,160	II	1.0	1.0	28,560	13,886	12,080
NAS Oceana Total Scenario 4b	I	23.0	23.0	459,264	256,007	187,536	I	22.0	20.0	439,296	224,561	162,833
	II	0	0	0	0	0	II	1.0	1.0	28,560	13,886	12,080
Mid-Atlantic Region Total Scenario 4b	I	34.75	33.75	703,872	389,001	283,276	I	42.75	37.75	853,632	435,483	307,813
	II	2.0	2.0	57,120	27,772	24,160	II	2.0	2.0	57,120	27,772	24,160

Chambers Field New Aircraft Maintenance Hangar Requirement (Scenario 4b):

- 4 ½ Type I Hangar Modules for Fleet Operational Squadrons
- 3 Type I Hangar O/H Modules and 1 Type I OS Module for NADEP Jacksonville detachment Oceana

Table 6-28 Summary of Mid-Atlantic Region New Hangar Requirements Matrix

Scenario	Activity	Hangar Type	O/H Modules	OS Modules	O/H Module (SF)	OS Module (SF)
1	Chambers Field (Operational Squadrons)	I	5.5	5.5	109,824	108,388
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
2a	Chambers Field (Operational Squadrons)	I	3.0	3.0	59,904	57,738
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
2b	Chambers Field (Operational Squadrons)	I	4.0	4.0	79,872	76,984
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
3a	Chambers Field (Operational Squadrons)	I	2.0	2.0	39,936	38,492
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
3b	Chambers Field (Operational Squadrons)	I	3.0	3.0	59,904	57,738
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
4a	Chambers Field (Operational Squadrons)	I	3.0	3.0	59,904	57,738
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0
4b	Chambers Field (Operational Squadrons)	I	4.5	4.5	89,856	89,142
	Chambers Field (NADEP JAX det.)	I	3.0	1.0	59,904	18,780
	NAS Oceana	I	0	0	0	0

6.4.1 Regional Aircraft Parking Apron Utilization

As discussed in Section 2.6.1.3 of Chapter 2, the future needs of Chambers Field will result in a requirement of approximately 100,000 SY of aircraft parking apron primarily due to the stand up of the H-60S aircraft squadrons. In the future, it is projected that NAS Oceana is projected to have a decreased requirement of approximately 1,000 SY. This is seen as negligible. Since aircraft parking is directly associated to aircraft maintenance facilities, it is assumed that only Regional hangar recommendations will impact overall Regional aircraft parking. Due to the specific nature of transient aircraft, parking associated with these aircraft are assumed to be fixed for each individual activity.

6.4.2 Regional Opportunities

Fleet Logistics Support Squadron VR-56

Implementing the recommendation to relocate VR-56 from Hangar LP33 at Chambers Field to Hangar 200 at NAS Oceana would increase the projected aircraft parking apron requirements 3.4 % by 2015 at NAS Oceana and decrease the projected aircraft parking apron requirements 4.2 % by 2015 at Chambers Field. It is anticipated that NAS Oceana would have sufficient existing aircraft parking apron to accommodate the VR-56 parking requirements. See Table 6-29 for the aircraft parking apron future permanent party requirements with VR-56 relocated to NAS Oceana.

Relocating VR-56 to NAS Oceana would help to relieve the projected aircraft parking in the LF area of Chambers Field by relocating MAG-42, det. B to Hangar LP33 and moving the new MH-60S Expeditionary Squadron into Hangar LF60. There will be a reduced number of aircraft in the LF area. It should be noted that moving MAG-42, det. B to Hangar LP33 will mix fixed wing and rotary wing aircraft in the LP (North) area. See Figure 6-6 and 6-7 for the proposed aircraft parking in LF and LP(North) aircraft parking aprons.

Table 6-29 Chambers Field Aircraft Parking Apron Requirements with VR-56 Relocated to NAS Oceana

Squadron	Type of Aircraft	Number of Aircraft		Aircraft in Hangar		Aircraft on Apron		Planning Guidance (SY per aircraft)		Peripheral Taxiway Width (LF)	Total Aircraft Parking Requirement (SY)	
		(2003)	(2015)	(2003)	(2015)	(2003)	(2015)	45 degree	90 degree		(2003)	(2015)
Permanent Party Aircraft												
HC-6	MH-60S	12	10	4	4	10	8	-	1,557	101	27,248	21,798
HC-8	MH-60S	3	10	1	4	3	8	-	1,557	101	8,174	21,798
	H-46	11	0	4	0	9	0	-	1,533	95	24,145	0
HC-2	H-3	16	0	6	0	13	0	-	2,036	113	46,319	0
	MH-60S	0	20	0	7	0	17	-	1,557	101	0	46,321
HM-14	MH-53	15	15	5	5	13	13	-	3,398	139	77,305	77,305
VAW-120	E-2C	10	10	3	3	9	9	-	1,985	150	31,264	31,264
	C-2A	5	5	2	2	4	4	-	2,000	150	14,000	14,000
VAW-121	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VAW-123	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VAW-124	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VAW-125	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VAW-126	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VRC-40	C-2A	12	12	4	4	10	10	-	2,000	150	35,000	35,000
VAW-78	E-2C	4	4	2	2	3	3	-	1,985	150	10,421	10,421
VR-56	C-9	5	0	1	0	5	0	-	3,165	150	27,694	0
HCS-4	HH-60H	8	8	3	3	7	7	-	1,557	101	19,073	19,073
MAG-42, Det. B	CH-46	12	12	4	4	10	10	-	1,533	95	26,828	26,828
HC-new	MH-60S	0	12	0	4	0	10	-	1,557	101	0	27,248
CV-1	MH-60S	0	8	0	3	0	7	-	1,557	101	0	19,073
CV-2	MH-60S	0	8	0	3	0	7	-	1,557	101	0	19,073
CV-3	MH-60S	0	8	0	3	0	7	-	1,557	101	0	19,073
CV-4	MH-60S	0	8	0	3	0	7	-	1,557	101	0	19,073
CV-5	MH-60S	0	8	0	3	0	7	-	1,557	101	0	19,073
Station	C-12	5	6	1	1	5	6	-	1,040	150	9,100	5,460
Total Permanent Party		138	184	50	68	116	155				408,676	489,446
Transient Aircraft												
	C-130	2	2	-	-	2	2	-	4,940	150	17,290	17,290
	C-5	1	2	-	-	1	2	-	14,300	150	25,025	50,050
	767	1	1	-	-	1	1	-	9,400	150	16,450	16,450
	DC-8	1	0	-	-	1	0	-	8,073	150	14,128	0
	C-141	1	0	-	-	1	0	-	9,680	150	16,940	0
	C-17	1	3	-	-	1	3	-	5,670	150	9,923	17,010
Total Transient		7	8			7	8				99,756	113,558
NAVSTA Norfolk (Chambers Field) Subtotals												
		143	192	50	68	123	163				508,432	603,004
Less (-) deployed squadron(s)		-6	-14	-3	-6	-5	-12				-17,421	-36,494
NAVSTA Norfolk (Chambers Field) Totals		137	178	47	62	118	151				491,011	566,510

Table 6-30 NAS Oceana Aircraft Parking Apron Requirements with VR-56 Relocated from Chambers Field

Squadron	Type of Aircraft	Number of Aircraft		Aircraft in Hangar		Aircraft on Apron		Planning Guidance (SY per aircraft)		Peripheral Taxiway Width (LF)	Total Aircraft Parking Requirement (SY)	
		(2003)	(2015)	(2003)	(2015)	(2003)	(2015)	45 degree	90 degree		(2003)	(2015)
Permanent Party Aircraft												
VF-101	F-14A	5	0	2	0	4	0	1,778	-	150	12,446	0
	F-14B	9	0	3	0	8	0	1,778	-	150	24,892	0
	F-14D	8	0	3	0	7	0	1,778	-	150	21,781	0
VF(A)-11	F-14B	11	0	4	0	9	0	1,778	-	150	28,004	0
	F/A-18E	0	12	0	4	0	10	-	2,352	150	0	41,160
VF-31	F-14D	11	0	4	0	9	0	1,778	-	150	28,004	0
VF(A)-32	F-14B	11	0	4	0	9	0	1,778	-	150	28,004	0
	F/A-18F	0	12	0	4	0	10	-	2,352	150	-	41,160
VF(A)-103	F-14B	10	0	4	0	8	0	1,778	-	150	24,892	0
	F/A-18F	0	12	0	4	0	10	-	2,352	150	0	41,160
VF(A)-143	F-14B	11	0	4	0	9	0	1,778	-	150	28,004	0
	F/A-18F	0	12	0	4	0	10	-	2,352	150	0	41,160
VF(A)-211	F-14A	11	0	4	0	9	0	1,778	-	150	28,004	0
	F/A-18F	0	12	0	4	0	10	-	2,352	150	0	41,160
VF(A)-213	F-14D	11	0	4	0	9	0	1,778	-	150	28,004	0
	F/A-18F	0	12	0	4	0	10	-	2,352	150	0	41,160
CSFWL	T-34	6	6	2	2	5	5	-	570	150	4,988	4,988
VFA-106	F/A-18B	4	3	2	1	3	3	-	1,920	150	10,080	10,080
	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
	F/A-18D	16	8	6	3	13	7	-	1,920	150	43,680	23,520
	F/A-18E	0	7	0	3	0	6	-	2,352	150	0	24,696
	F/A-18F	0	17	0	6	0	14	-	2,352	150	0	57,624
VFA-15	F/A-18C	12	0	4	0	10	0	-	1,920	150	33,600	0
	F/A-18E	0	12	0	4	0	10	-	2,352	150	0	41,160
VFA-34	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFA-37	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFA-81	F/A-18C	12	0	4	0	10	0	-	1,920	150	33,600	0
VFA-83	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFA-87	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFA-105	F/A-18C	12	0	4	0	10	0	-	1,920	150	33,600	0
	F/A-18E	0	12	0	4	0	10	-	2,352	150	0	41,160
VFA-131	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFA-136	F/A-18C	12	10	4	4	10	8	-	1,920	150	33,600	26,880
VFC-12	F/A-18A	10	10	4	4	8	8	-	1,920	150	26,880	26,880
	F/A-18B	2	2	1	1	2	2	-	1,920	150	6,720	6,720
VR-56	C-40A	0	4	0	1	0	4	-	3,545	150	0	24,815
Station	H-3	2	0	1	0	2	0	-	2,036	113	7,126	0
	MH-60S	0	2	0	1	0	2	-	1,557	101	0	5,450
Total Permanent Party		258	225	92	82	214	187				687,509	702,213
Transient Aircraft												
	F/A-18C	5	4	-	-	5	4	-	1,920	150	16,800	13,440
	F/A-18E	0	3	-	-	0	3	-	2,352	150	0	12,348

6.4.3 Factors that may impact future Mid-Atlantic Region Aircraft Parking Apron Requirements

Like the previous aircraft maintenance hangar section, this section discusses several factors that may impact future aircraft parking requirements as well as future apron utilization within the Mid-Atlantic Region. As events warrant, aircraft parking apron requirements and utilization plans should be reviewed and updated. The scenarios presented in the aircraft maintenance hangar section above are shown at the end of this Section to show the impact to aircraft parking requirements. This will allow Regional aviation decision makers to see a complete picture of potential changes and how they may affect future needs. All of the scenarios assume that the recommendation to relocate VR-56 will be implemented.

6.4.4 Fleet Response Plan

A complete description of FRP is presented in Section 6.3.1. Once FRP is implemented, the typical deployment cycles will be altered such that all East Coast aircraft carrier air wings could be at their respective homebases at the same time. The current assumptions to “hot rack” single-sited airframes in the Mid-Atlantic Region will no longer be valid.

6.4.4.1 NAVSTA Norfolk Chambers Field

Implementation of FRP will impact Chambers Field since both the E-2C and MH-60S CV squadrons will be single-sited there – that is, all East Coast aircraft carrier airwing E-2C squadrons and MH-60S squadrons will be located at Chambers Field. Current and projected requirements presented in Section 3.6.1.3 of Chapter 3 assume one (1) E-2C operational squadron is always deployed today and will be in the future. Also, it was assumed that one (1) MH-60S CV operational squadron would always be deployed in the future. Implementation of FRP would increase the Chambers Field permanent party aircraft parking apron requirements by approximately 36,000 SY. See Table 6-31 for current and projected Chambers Field permanent party aircraft parking apron requirements with future implementation of FRP and Table 6-33 for a comparison of Chambers Field future requirements with and without FRP.

6.4.4.2 NAS Oceana

Implementation of FRP will not impact NAS Oceana since East Coast aircraft carrier airwing F/A-18 “Hornet” squadrons are currently split-sited with two (2) operational squadrons located at MCAS Beaufort in South Carolina. The East Coast aircraft carrier airwing F/A-18 “Super Hornet” squadrons are projected to be split-sited in accordance with the recent Record of Decision (ROD) with four (4) operational squadrons located at MCAS Cherry Point in North Carolina. See Table 6-34 for current and projected NAS Oceana hangar requirements with and without the future implementation of FRP.

Table 6-31 Chambers Field Existing and Projected Permanent Party Aircraft Parking Apron with Future Implementation of FRP

Squadron/Unit	Aircraft Type	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
		(2003)	(2015)	(2003)	(2015)
VAW-120	E-2C	9	9	31,264	31,264
	C-2A	4	4	14,000	14,000
VAW-121	E-2C	3	3	10,421	10,421
VAW-123	E-2C	3	3	10,421	10,421
VAW-124	E-2C	3	3	10,421	10,421
VAW-125	E-2C	3	3	10,421	10,421
VAW-126	E-2C	3	3	10,421	10,421
VRC-40	C-2A	10	10	35,000	35,000
HC-2	H-3	13	0	46,319	0
	H-60S	0	17	0	46,321
HC-6	H-60S	10	8	27,248	21,798
HC-8	H-46	9	0	24,145	0
	H-60S	3	8	8,174	21,798
HC-new	H-60S	0	10	0	27,248
HM-14	MH-53	13	13	77,305	77,305
CV-1	H-60S	0	7	0	19,073
CV-2	H-60S	0	7	0	19,073
CV-3	H-60S	0	7	0	19,073
CV-4	H-60S	0	7	0	19,073
CV-5	H-60S	0	7	0	19,073
VAW-78	E-2C	3	3	10,421	10,421
VR-56	C-9	5	0	27,694	0
HCS-4	HH-60H	7	7	19,073	19,073
MAG-42, Det. B	CH-46	10	10	26,828	26,828
Station	C-12	5	6	9,100	10,920
Permanent Party Subtotal		116	155	408,676	489,446
Less (-) deployed squadron(s)		-5	0	-17,421	0
Permanent Party Totals		111	155	391,255	489,446

Table 6-32 Comparison of Current and Projected Permanent Chambers Field Party Aircraft Parking Apron Requirements with and without Future Implementation of FRP

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total without FRP	111	143	391,255	452,952
NAVSTA Norfolk (Chambers Field) Total with FRP	111	155	391,255	489,446
NAVSTA Norfolk (Chambers Field) Difference	0	+12	0	+36,494

Table 6-33 NAS Oceana Current and Projected Permanent Party Aircraft Parking Requirement

Squadron/Unit	Aircraft Type	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
		(2003)	(2015)	(2003)	(2015)
VF-101	F-14A	4	0	12,446	0
	F-14B	8	0	24,892	0
	F-14D	7	0	21,781	0
VF(A)-11	F-14B	9	0	28,004	0
	F/A-18E	0	10	0	41,160
VF-31	F-14D	9	0	28,004	0
VF(A)-32	F-14B	9	0	28,004	0
	F/A-18F	0	10	0	41,160
VF(A)-103	F-14B	8	0	24,892	0
	F/A-18F	0	10	0	41,160
VF(A)-143	F-14B	9	0	28,004	0
	F/A-18F	0	10	0	41,160
VF(A)-211	F-14A	9	0	28,004	0
	F/A-18F	0	10	0	41,160
VF(A)-213	F-14D	9	0	28,004	0
	F/A-18F	0	10	0	41,160
COMSTRKFITWINGLANT	T-34	5	5	4,988	4,988
VFA-106	F/A-18B	3	3	10,080	10,080
	F/A-18C	10	8	33,600	26,880
	F/A-18D	13	7	43,680	23,520
	F/A-18E	0	6	0	24,696
	F/A-18F	0	14	0	57,624
VFA-15	F/A-18C	10	0	33,600	0
	F/A-18E	0	10	0	41,160
VFA-34	F/A-18C	10	8	33,600	26,880
VFA-37	F/A-18C	10	8	33,600	26,880
VFA-81	F/A-18C	10	0	33,600	0
VFA-83	F/A-18C	10	8	33,600	26,880
VFA-87	F/A-18C	10	8	33,600	26,880
VFA-105	F/A-18C	10	0	33,600	0
	F/A-18E	0	10	0	41,160
VFA-131	F/A-18C	10	8	33,600	26,880
VFA-136	F/A-18C	10	8	33,600	26,880
VFC-12	F/A-18A	8	8	26,880	26,880
	F/A-18B	2	2	6,720	6,720
VR-56	C-40A	0	4	0	24,815
Air Operations SAR	H-3	2	0	7,126	0
	MH-60S	0	2	0	5,450
Permanent Party Totals		214	187	687,509	702,213

Table 6-34 Comparison of Current and Projected NAS Oceana Permanent Party Aircraft Parking Apron Requirements with and without Future Implementation of FRP

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAS Oceana Total without FRP	214	187	687,509	702,213
NAS Oceana Total with FRP	214	187	687,509	702,213
NAS Oceana Difference	0	0	0	0

6.4.4.3 Naval Reserve Fleet Integration Plan

A Plan is currently under development that will map a strategy to incorporate the existing Navy reserve squadrons, both fixed and rotary wing, into the active force structure. The final Plan and its recommendations could impact aviation facilities in the Mid-Atlantic Region. Both Chambers Field and NAS Oceana have reserve squadrons. It should be noted that the reserve squadron at NAS Oceana, VFC-12, is also the Naval Reserve’s premier adversary squadron. Therefore, it is less like the Reserve Fleet Integration Plan would impact NAS Oceana. The Naval reserve squadrons at Chambers Field that could, at some point in the future, be impacted by the Naval Reserve Fleet Integration Plan are HCS-4 and VAW-78. VR-56 is also a Naval reserve squadron currently located at Chambers Field, but due to the nature of its mission, it is unlikely that the Integration Plan would affect this squadron. Should, at some point in the future, HCS-4 and/or VAW-78 be disestablished or relocated to another installation outside the Mid-Atlantic Region aircraft parking apron requirements at Chambers Field would decrease by approximately 29,500 SY.

6.4.4.4 Transition of Marine Helicopter Squadrons to MV-22 Aircraft

The MV-22 Osprey tiltrotor aircraft is a revolutionary, vertical/short takeoff and landing (V/STOL), multi-purpose tactical aircraft that will replace the current fleet of Marine Corps Vietnam-era CH-46 and CH-53 aircraft. The Marine Corps will employ a phased strategy for the transition of the Marine Corps Medium Lift fleet to the MV-22 aircraft. Twenty-two (22) CH-46 and CH-53 squadrons are scheduled to transition to the MV-22 aircraft. Eighteen (18) of the squadrons are active duty squadrons and four (4) are reserve squadrons. One of the reserve squadrons scheduled to transition to the MV-22 is Helicopter Marine Medium Squadron HMM-774 (part of MAG-42, det. B) currently located at Chambers Field. Should, at some point in the future, MAG-42, det. B be relocated to another installation outside the Mid-Atlantic Region the Chambers Field aircraft parking apron requirement would be decreased by approximately 27,000 SY.

6.5 Future Apron Needs

The following Tables 6-35 through 6-41 represents various aviation scenarios within the Mid-Atlantic Region that could impact future aircraft parking apron needs. These scenarios match those presented in Section 6.4 of this Chapter. Table 6-42 highlights the scenarios with the least and greatest requirements.

Table 6-35 Scenario 1 Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 1	111	155	391,255	489,446
NAS Oceana Total Scenario 1	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 1	325	342	1,078,764	1,191,659

Table 6-36 Scenario 2a Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 2a	111	133	391,255	423,458
NAS Oceana Total Scenario 2a	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 2a	325	320	1,078,764	1,125,671

Table 6-38 Scenario 3a Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 3a	111	123	391,255	396,630
NAS Oceana Total Scenario 3a	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 3a	325	310	1,078,764	1,098,843

Table 6-37 Scenario 2b Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 2b	111	145	391,255	459,952
NAS Oceana Total Scenario 2b	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 2b	325	332	1,078,764	1,162,165

Table 6-39 Scenario 3b Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 3b	111	135	391,255	433,124
NAS Oceana Total Scenario 3b	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 3b	325	322	1,078,764	1,135,337

Table 6-40 Scenario 4a Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 4a	111	133	391,255	426,124
NAS Oceana Total Scenario 4a	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 4a	325	320	1,078,764	1,128,337

Table 6-41 Scenario 4b Parking Apron Needs

	Number of Aircraft Parked on Apron		Approximate Aircraft Parking Apron Requirement (SY)	
	(2003)	(2015)	(2003)	(2015)
NAVSTA Norfolk (Chambers Field) Total Scenario 4b	111	145	391,255	462,618
NAS Oceana Total Scenario 4b	214	187	687,509	702,213
Mid-Atlantic Region Total Scenario 4b	325	332	1,078,764	1,164,831

Table 6-42 Summary of Mid-Atlantic Region Permanent Party Aircraft Future Parking Apron Requirements Matrix

Scenario	Activity	Number of Aircraft Parked on Apron	Approximate Aircraft Parking Apron Requirement (SY)
1	Chambers Field	155	489,446
	NAS Oceana	187	702,213
2a	Chambers Field	133	423,458
	NAS Oceana	187	702,213
2b	Chambers Field	145	459,952
	NAS Oceana	187	702,213
3a	Chambers Field	123	396,630
	NAS Oceana	187	702,213
3b	Chambers Field	135	433,124
	NAS Oceana	187	702,213
4a	Chambers Field	133	426,124
	NAS Oceana	187	702,213
4b	Chambers Field	145	462,618
	NAS Oceana	187	702,213

6.6 Regional Aviation Maintenance

6.6.1 Organizational-Level Maintenance

Regional recommendations regarding aircraft maintenance hangars are discussed in Section 6.2 of this Chapter.

6.6.2 Intermediate-Level Maintenance

Due to the complexity and special nature of each aircraft and its components, no Regional recommendations or opportunities to consolidate facilities at either NAS Oceana or Chambers Field is foreseen. The existing facilities at NAS Oceana will support the future needs of the F/A-18 “Hornet” and F/A-18 “Super Hornet” aircraft. The existing facilities (AIMD currently under construction) at Chambers Field will support the future needs of the E-2C, C-2A, MH-60S, and MH-53 aircraft. Future support of the CH-46 aircraft is to be determined since the Navy will no longer have the CH-46 in its inventory by 2010. AIMD currently supports the CH-46 Marine Corps reserve squadron (MAG-42, det. B).

6.6.3 Depot-Level Maintenance

Both NAS Oceana and Chambers Field will have a future need to provide hangar space to facilitate depot artisan teams to perform on-site integrated maintenance concept (IMC), aircraft modifications (MOD), and squadron-requested planner and estimator repair to damaged aircraft (also known as in-service repair (ISR)). Since IMC, ISR, and IMC are specialized and very specific to each aircraft, Regional consolidation at either NAS Oceana or Chambers Field is not seen as feasible.

6.7 Mid-Atlantic Region Aviation Facilities Development Plan

In the Mid-Atlantic Region, Chambers Field and NAS Oceana will remain vibrant airfields in the future. The majority of East Coast aircraft carrier airwing aircraft will be homebased within the Region. The major aviation issues that face the Mid-Atlantic Region in the future include, but are not limited to, the introduction of the MH-60S at Chambers Field and the introduction of the F/A-18 “Super Hornet” at NAS Oceana. The Region Aviation Facilities Development Plan focuses on efficient and effective utilization of existing infrastructure while

maximizing operational readiness. The Plan identifies opportunities for consolidation of facilities and functions within the Region. It also includes new construction, demolition, and rehabilitation of Regional aviation facilities. The following actions support the Regional aviation needs:

6.7.1 NAVSTA Norfolk Chambers Field

East Coast Home Base for the MH-60S Helicopter

- Construct a two-module aircraft maintenance hangar (P-699) for two operational MH-60S CV squadrons in the SP area.
- Construct a two-module aircraft maintenance hangar (P-767) for two operational MH-60S CV squadrons in the LF area.
- Rehab Hangar LF60 for one operational MH-60S Expeditionary squadron.
- Construct two new lighted standard VFR helicopter landing pads with same direction ingress/egress in the SP area.
- Construct an MH-60S Training Facility in SP area (two phases (P-705, Phase I and P-707, Phase II))
- Develop the LF area as a helicopter operations area only
 - ◆ Relocate COMNAVAIRLANT aircraft boneyard
 - ◆ Relocate PWC vehicle storage yard
 - ◆ Relocate COMNAVAIRLANT ship crane maintenance.
 - ◆ Relocate FTSC LANT and demolish LF-18
 - ◆ Construct two hover check pads with access taxiways (P-757) in the LF area
 - ◆ Construct Compass Rose in the LF area (requires relocation of existing fuel pits).
 - ◆ Extend Runway 09/26 (Right) to the east to enhance helicopter training opportunities.

Logistics Support Squadron Aircraft Upgrade

- Relocate VR-56 from Hangar LP33 (Chambers Field) to Hangar 200 (NAS Oceana) (P-8xxx???)
- Relocate MAG-42, det. B from Hangar LF60 to Hangar LP33

Reduce airfield safety and operational incompatibilities

- Demolish LP-167
- Relocate OSA Terminal in proximity to existing air passenger terminal.

Enhance operations

- Construct a new control tower to control helicopter operations in the LF and SP areas.
- Construct three refueling hydrants in the LP area to service both fixed wing and rotary wing aircraft.
- Construct a new consolidated air cargo facility.
- Install a new Instrument Landing System (ILS) or Global Positioning System (GPS) Landing System on Runway 10/28.

6.7.2 NAS Oceana

- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 500)
- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 404)
- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 200)
- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 122)
- Install Point of Use Frequency Converters (PUFCs) on F/A-18 E/F parking apron.
- Reconfigure Building 240 interior.
- Repair fire protection system (Hangar 500)
- Repair maintenance spaces (Hangar 200)
- Structural repairs (Hangar 23)
- Roof/Structural repairs (Hangar 404)
- Fire protection/structural repairs (Hangar 122)
- Replace touchdown zone lighting Runway 5R/23L

6.7.3 NALF Fentress

- No action planned

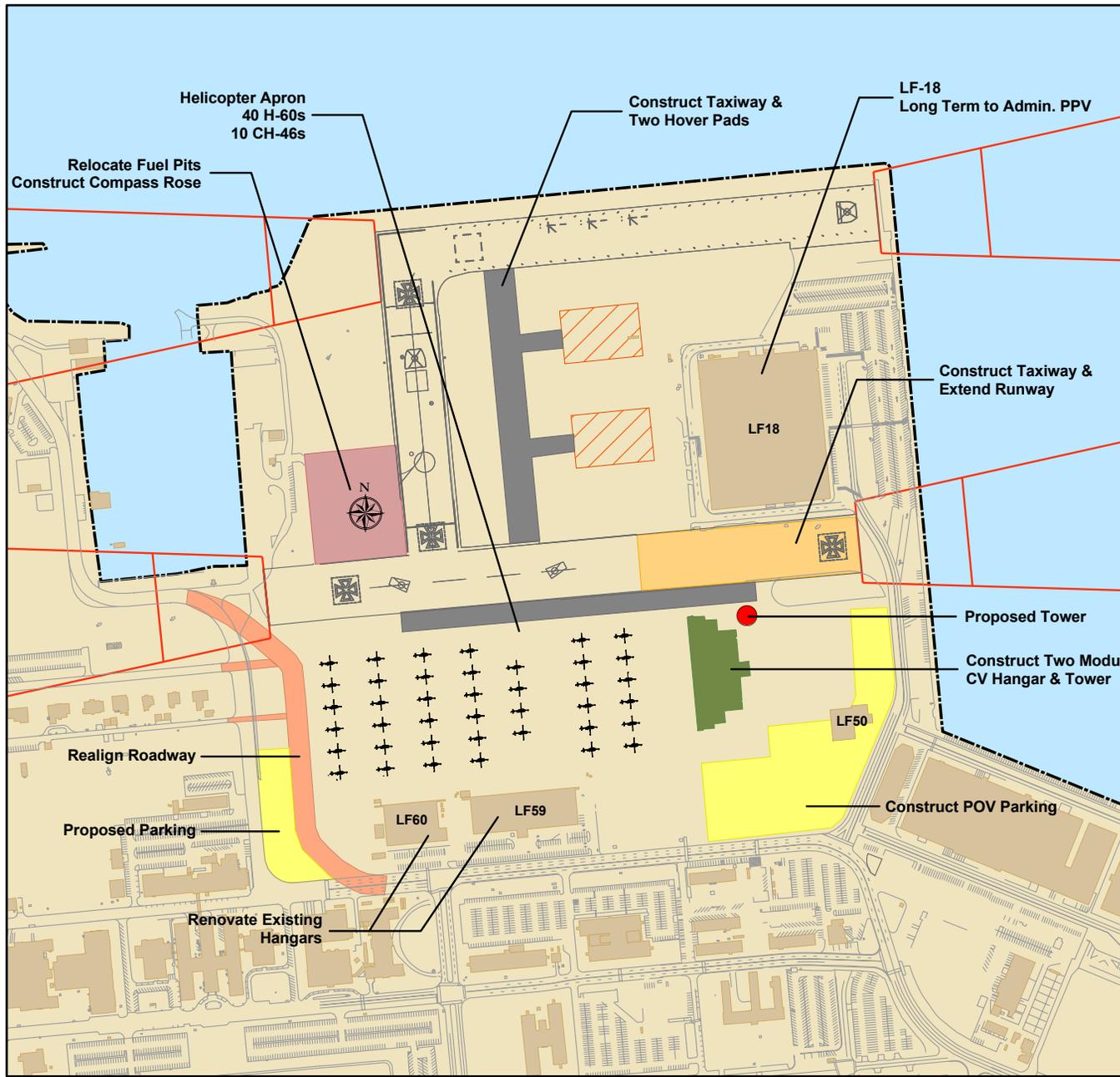


Figure 6-4
Regional
Development Plan
LF Area



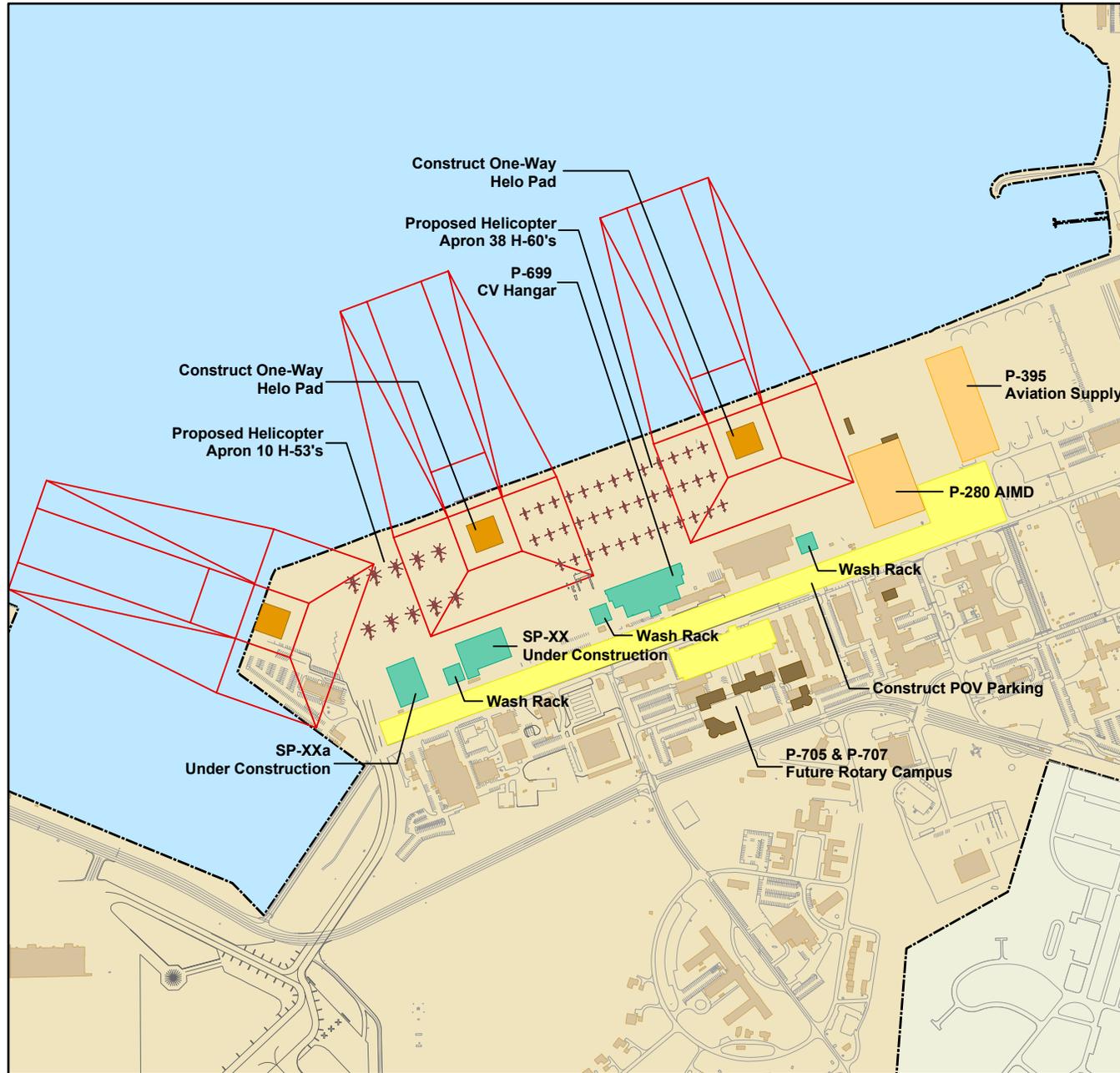
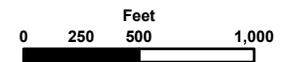


Figure 6-5
Regional
Development Plan
SP Area



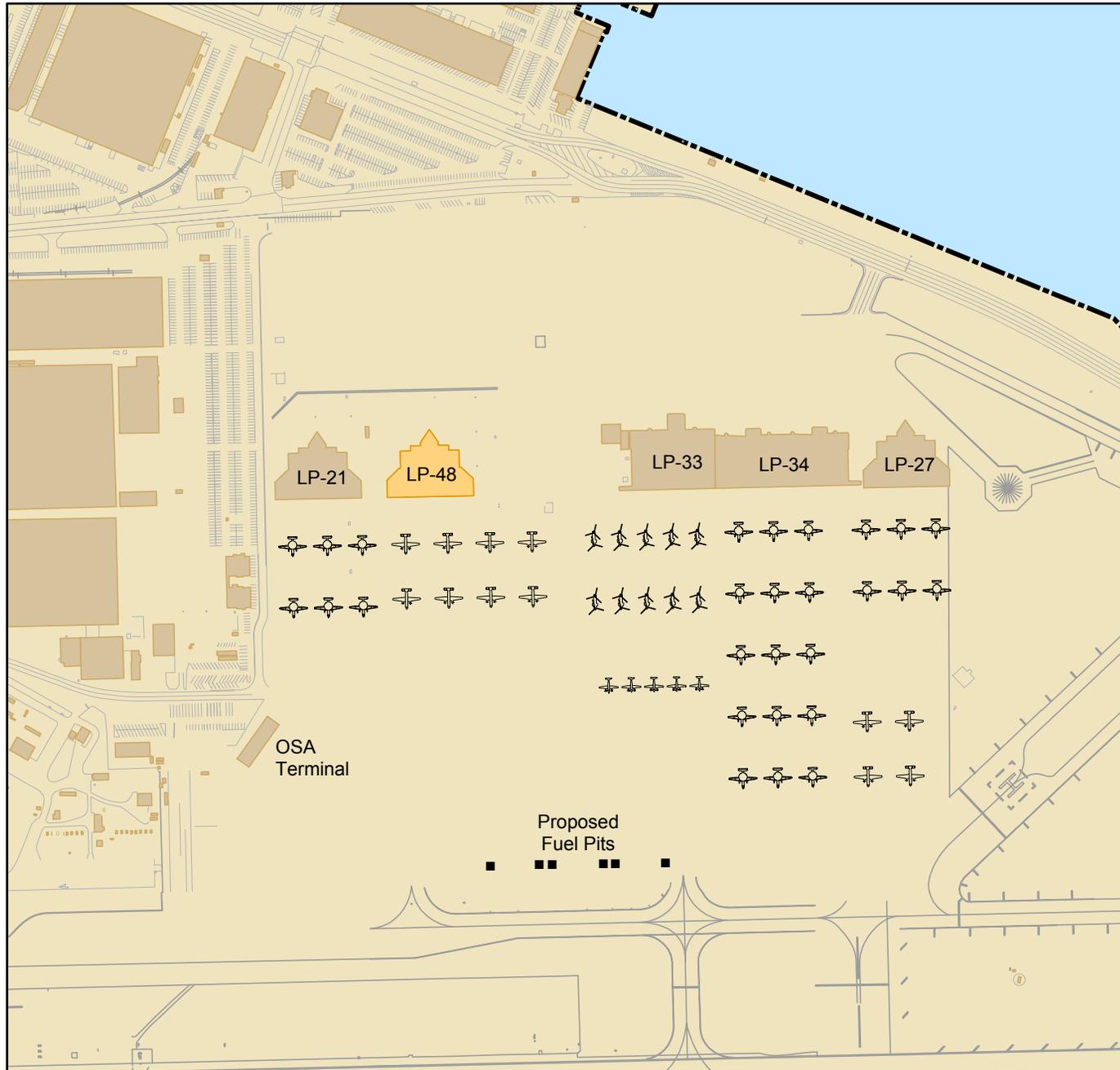
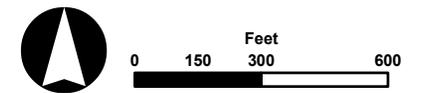


Figure 6-6
Regional
Development Plan
LP North Area



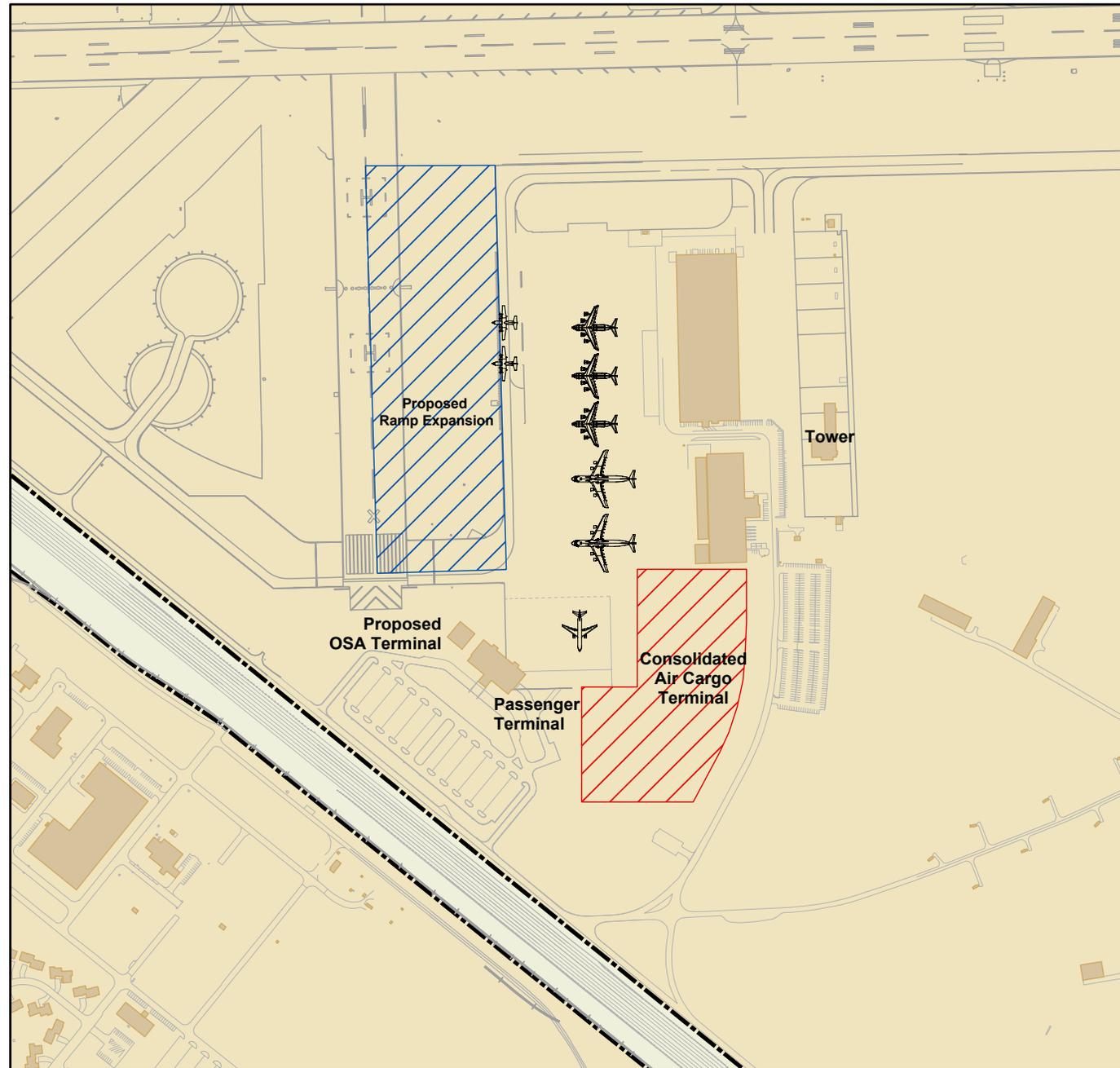
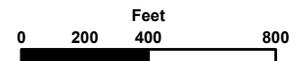


Figure 6-7
Regional
Development Plan
LP South Area



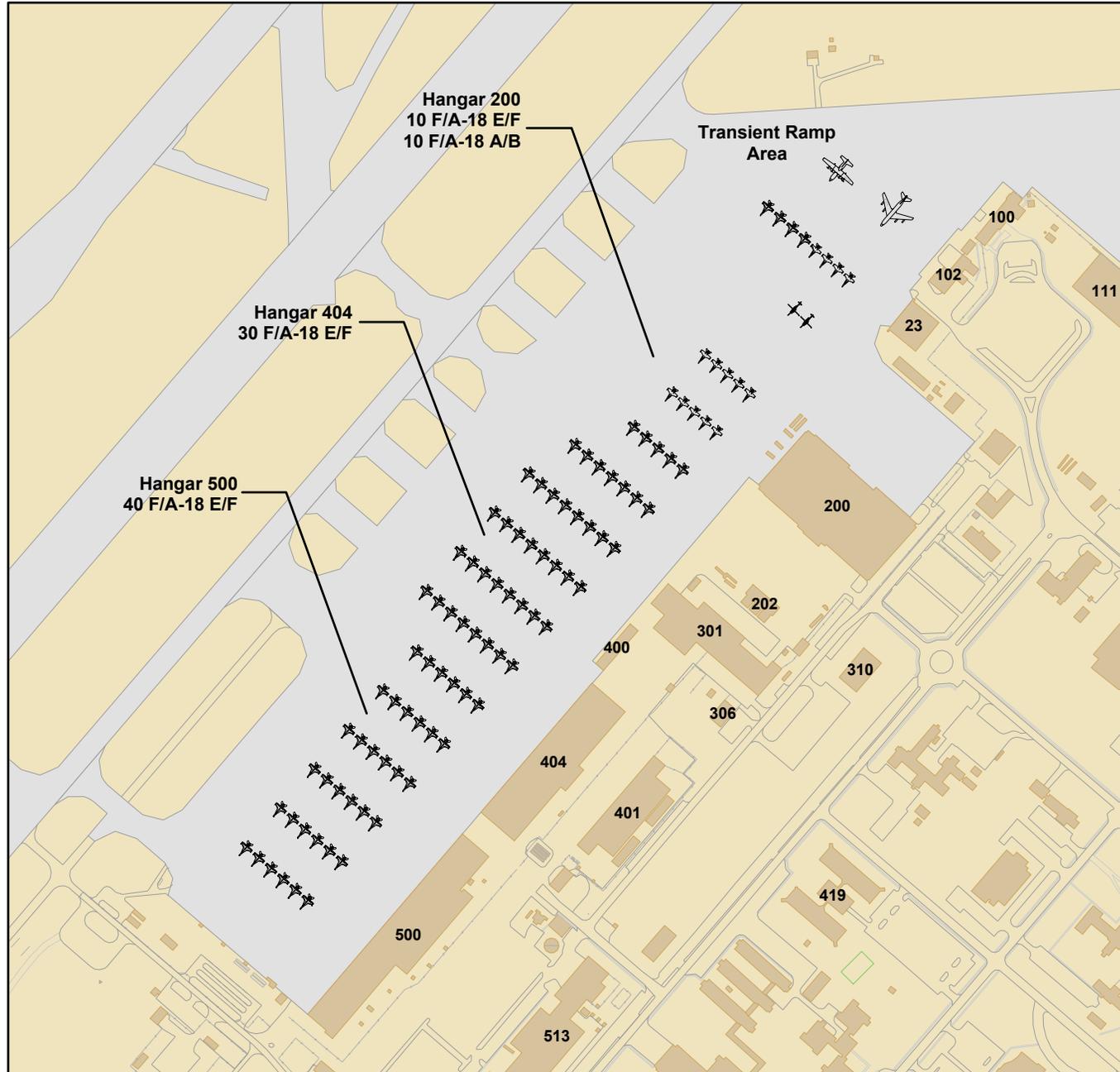


Figure 6-8
Regional
Development Plan
Northwest Ramp

- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 500)
- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 404)
- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 200)
- Install Point of Use Frequency Converters (PUFCs) on F/A-18 E/F parking apron.
- Reconfigure Building 240 interior.
- Repair fire protection system (Hangar 500)
- Repair maintenance spaces (Hangar 200)
- Structural repairs (Hangar 23)
- Roof/Structural repairs (Hangar 404)



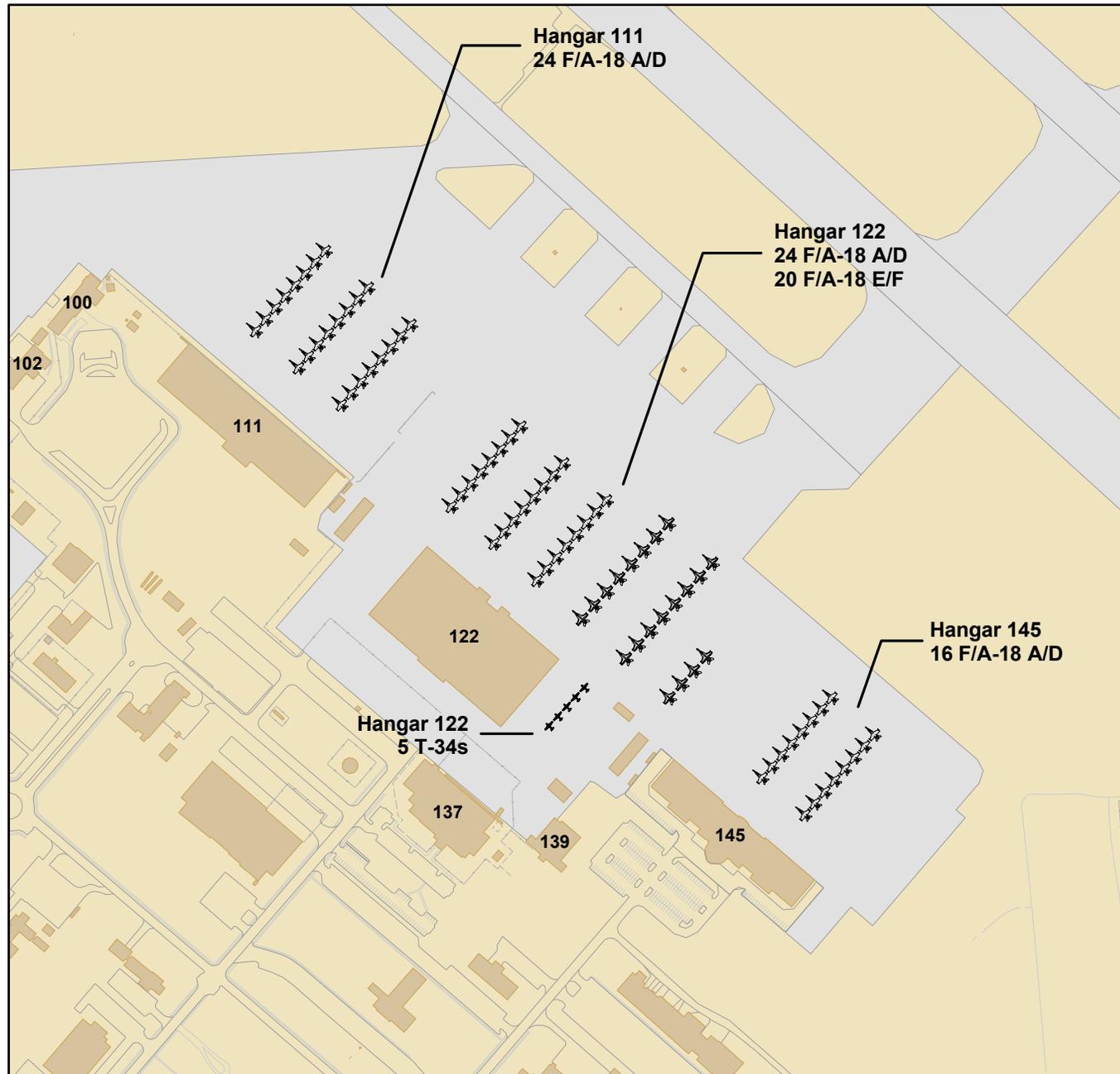


Figure 6-9
Regional
Development Plan
Northeast Ramp

- Construct secure space within existing 02 aircraft maintenance hangar space (Hangar 122)
- Fire protection/structural repairs (Hangar 122)
- Replace touchdown zone lighting Runway 5R/23L

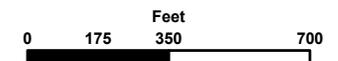


Figure 6-10
NALF Fentress
Regional
Development Plan

