

#### **4.9.3 Full Support Alternative**

The Full Support alternative includes all components of the Preferred Alternative. Consequently, socioeconomic impacts associated with the Preferred Alternative would also result from implementation of the Full Support alternative. Considered below are only those project components of the Full Support alternative not found in the Preferred Alternative.

##### **4.9.3.1 Airfield and Truman Annex Improvements**

While the additional workers would come from other locations as well as the local commuting area, the total population increase is anticipated to be less than a four percent increase in the overall population. Thus, there would be some impacts to socioeconomic factors with the implementation of the full support alternative. While land uses would stay the same and although no additional housing units are needed, lower enlisted rates now sharing houses would be required to return to living in barracks that do not meet the current Navy barracks standards of a separate room and shared bath per two occupants.

An increase of 300 military and civilian salaries would benefit the local and regional economy. WRONG. As with the Preferred Alternative, the Navy's and the City's use of the Mole pier would be mutually beneficial.

The construction and operation of the additional projects in the Full Support alternative also would occur within the high security environment of Truman Annex and Boca Chica Airfield, which would prohibit access by unauthorized personnel. As with the Preferred Alternative, most project impacts would be contained within the NAS and implementation of the projects would not result in disproportionate impacts to Bahama Village and to minority or low income populations, and no potential health or safety impacts to children would occur.

#### **4.9.4 No-Action Alternative**

Under the No-Action alternative, proposed construction activities at the NAS would not occur. Baseline conditions would remain unchanged. Therefore, no significant impacts to socioeconomics or environmental justice would occur as a result of implementation of the No-Action alternative.

### **4.10 NOISE/AICUZ**

#### **4.10.1 Preferred Alternative**

The projected number of aircraft operations as a result of the Preferred Alternative will fall well below the number of operations used in the existing AICUZ study, which the Navy issued in 1977. It is projected that there will be approximately 13,500 fewer aircraft operations in CY07 than occurred in 1977 (61,402 in 2007 vs. 85,000 in 1977). By way of comparison, the total number of air operations for CY01 was 60,800.

Aircraft operations by aircraft type and time of day for 1977, 2001 and 2007 are presented in Table 4-3. As shown in the table, the 1977 operations greatly exceeded the actual 2001 operations and the projected 2007 operations. Although the overall total numbers of operations are similar for 2001 and 2007, the subtotals by types of aircraft are significantly different. F/A-18C/D aircraft account for over one-third of the total number of operations at NAS Key West and account for the most operations by aircraft type in 2001. The second highest number of operations by aircraft type are F-14 operations. The Navy's inventory of F-14 aircraft, and some older model F/A-18C/D aircraft, are being retired and replaced by the F/A-18E/F. The transition to the F/A-18E/F will be completed by 2007. In all, 187 F-14 and F/A-18C/D aircraft will eventually be replaced with 162 F/A-18E/F aircraft. Consequently, as reflected in Table 4-3, the number of F/A-18E/F operations significantly increase by CY07, though overall operations will remain well below the 1977 AICUZ level. As the new aircraft fully enters service, overall F/A-18 C/D and E/F aircraft operations increase 15 percent for CY07 over CY01. Other notable changes between CY01 and CY07 include an increase in Orange Air, E-2/C-2, and training aircraft operations. Approximately six percent of all operations (3,925 operations) under the Preferred Alternative would be night operations

(conducted between 2200 and 0700), and of these, roughly forty percent would be conducted by F/A-18 C/D or E/F aircraft (1,539 operations). F/A-18C/D and E/F aircraft are the most dominant aircraft in terms of number of operations and noise impact for both CY01 and CY07. In contrast, the RA-5C and F-4J were the dominant aircraft in terms of number of operations and noise impact in 1977 and approximately ten percent of all operations (8,500) were conducted at night.

**Table 4-3 NAS KEY WEST AIRCRAFT OPERATIONS CY 1977, CY 01, and CY 07**

Aircraft Type	CY 1977 Operations	CY 01 Operations	CY 07 Operations
Strike			
F/A-18 C/D		22,262	14,150
F/A-18 E/F		3,912	15,953
F-16		1,269	1,060
F-15		1,845	960
F-14		12,648	0
F-5		924	486
A-10		76	0
AV-8		36	600
Orange Air		474	3,489
RA-5C	42,500		
F-4	34,000		
A-4	5,950		
Electronic/Surveillance			
E/A-6		132	200
E-2/C-2		9,997	12,968
EC-121M	1,100		
Transport	900	4,502	5,478
Pilot Training		2,129	5,286
Helicopters	550	594	772
Total	85,000	60,800	61,402

Source: U.S. Navy 2003

The CY07 NAS Key West 65 DNL contour, comparable to the beginning of Noise Zone 2 in the 1977 AICUZ study, as developed by Wyle Laboratories extends approximately 3 miles to the north of NAS Key West over water and U.S. Route 1. The 65 DNL contour also extends about 5 miles to the southwest and portions of the 65 DNL contour include all of Geiger Key, East Rockland Key, and most of Big Coppitt Key. As noted in Section 3.10 of Chapter 3, there are some land use controls recommended within the 65 DNL noise contour. The 75 DNL contour, comparable to the beginning of Noise Zone 3 in AICUZ studies, extends off base impacting portions of Geiger Key and East Rockland Key to the east and to the west, a small portion of Stock Island near Boca Chica Channel. As noted in Section 3.10 of Chapter 3, there are additional land use controls recommended within the 75 DNL noise contour.

The 1977 CNR 2 contour (the beginning of Noise Zone 2) extends to the southwest and over portions of Cow Key, and Stock Island. To the east, the CNR 2 contour includes all of Geiger Key, East Rockland Key, Big Coppitt Key and Shark Key. The CNR 3 contour (the beginning of Noise Zone 3) extends off base covering portions of Geiger Key, Big Coppitt Key and East Rockland Key to the East and a small portion of Stock Island to the West near Boca Chica Channel.

There would be a decrease in off-base noise exposure in Noise Zone 2 between the 1977 AICUZ and the projected 2007 noise contours for some areas. Land areas previously included in Noise Zone 2 would be reduced to the North and East of the airfield on Big Coppitt Key and Shark Key. These areas are largely developed, although some undeveloped property exists. Some areas covered by the 2007 noise contours are increased over the largely developed areas of Raccoon Key, Stock Island and a small area in Key West at the end of the Key West International airport runway. There would be a decrease in off-base noise exposure in Noise Zone 3 on Big Coppitt Key, East Rockland Key, Geiger Key and Boca Chica Key to the North and East and a slight expansion of noise contours slightly to the West, including small portions on the edges of Stock Island and Raccoon Key. A comparison of the approximate off-base land areas included in Noise Zones 2 and 3 are shown in Table 4-4 below.

**Table 4-4 Approximate Private Off-Base Land Areas Included in 1977 and 2007 Noise**

	Land Area 1977 (acres)	Land Area 2007 (acres)
	Developed/Undeveloped	Developed/Undeveloped
Noise Zone 2 & 3	599/894	1937
Purchased in 1980s		617
Totals	1493	1320

APZs were calculated for CY 07 operations at NAS Key West. By CY 07, the Navy will have transitioned from the F-14 to the F/A-18 E/F and all runways have Clear Zones. APZs I and II center on runways 13-31 and 40-25, and additionally for runway 13-31, the entire field carrier landing practice [FCLP] pattern. The projected APZs would impact portions of Raccoon Key to the west and Big Coppitt, East Rockland, Geiger, and Saddlebunch Keys to the east. The inclusion of larger portions of Geiger Key and East Rockland Key that are projected under the CY 07 APZs as opposed to the 1977 APZs are due in large part to the differences in the APZ criteria and methodology as discussed in Chapter 3.

This difference in 1977 and 2002 APZ criteria precludes an equal direct comparison. However, because of the differences in the criteria, the potential CY 07 APZs do include larger portions of Geiger Key and East Rockland Key than those of 1977.

The Navy will continue to work with the City of Key West to plan for compatible land use development within the projected noise zones and APZs under the Preferred Alternative.

**4.10.2 Full Support Alternative**

The Full Support alternative would likely result in very minor changes from the noise contours or APZs projected for CY07 under the Preferred Alternative. As noted in Chapter 2, under the Full Support Alternative, the projected increase in available support services would likely result in homebasing one or two aircraft squadrons at the NAS. Under Navy homebasing criteria, the most likely squadrons to be homebased at the NAS would be non-tactical support aircraft such as the E-2 or C-2. The homebasing of one or two squadrons of E-2 or C-2 aircraft have the potential to affect only minor changes because they are relatively quiet in comparison to the F-18 C/D and F/A-18 E/F aircraft, which are the dominant aircraft for noise impacts and which are already addressed in the projected 2007 noise contours.

**4.10.3 No-Action Alternative**

Under the No-Action alternative, the proposed construction activities at NAS Key West would not occur. This would result in no change to the baseline.