

# GLENVIEW NAVAL AIR STATION GLENVIEW, ILLINOIS



Engineering Field Division/Activity: SOUTH DIV  
 Major Claimant: COMNAVFACENGCOM  
 Size: 1,285 Acres  
 Funding to Date: \$20,591,000  
 Estimated Funding to Complete: \$19,203,000

**Base Mission:** Closed; NAVFAC is caretaker until transfer. Previously provided facilities, services, training, and support operations of aviation activities of Naval and Marine Corps Air Reserve Commands; administers the Naval Air Reserve program and trained assigned units for mobilization

**Contaminants:** POLs, solvents, PCBs, POL sludge

Number of Sites:		Relative Risk Ranking of Sites:			
CERCLA:	38	High:	5	Not Evaluated:	1
RCRA Corrective Action:	0	Medium:	10	Not Required:	23
RCRA UST:	3	Low:	2		
<b>Total Sites:</b>	<b>41</b>				

	<b>BRAC III</b>
<b>Sites Response Complete: 23</b>	

## EXECUTIVE SUMMARY

Glenview Naval Air Station (NAS) (1121 acres) is located in the center of the Village (Town) of Glenview, Illinois and about 20 miles north of Chicago. Lake Michigan is approximately 6 miles east of the station. NAS Glenview was established in 1937 due to the limited facilities of the Great Lakes airfield to provide accommodations for service type aircraft. At the outbreak of World War II, it was used for flight training, and in 1946 it reverted to a Reserve Command training facility. Typical past operations on the station in support of flight training which resulted in contaminated sites are operations such as aircraft and vehicle maintenance, fueling, and washing; fire fighting training; support shops such as machining, metal working, painting, carpentry, and plumbing; storage of supplies and materials such as fuels, pesticides, transformers, and chemicals; sludge disposal; and disposal in landfills. Of the sites identified, those that present the greatest risk are the fire fighter training areas and areas of past surface disposal. The Libertyville Training Site (164 acres) is located at the Village of Vernon Hills, Illinois which is approximately 13 miles northwest of NAS Glenview. The Libertyville site was a former flight training airfield and later was used as a NIKE missile air defense location. The majority of the future cleanup of the NAS Glenview and Libertyville training site will be conducted under CERCLA.

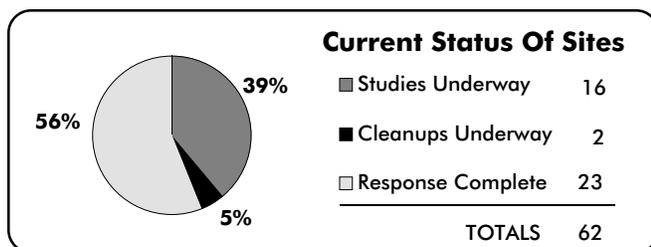
Glenview is surrounded by densely populated residential areas and light industrial areas. The local community is most concerned about fast track cleanup so that the infrastructure necessary to support a changed land use and a new economic development plan can be constructed as soon as practical.

In 1993, the Base Realignment and Closure (BRAC) commission recommended NAS Glenview and the Libertyville Training Site for closure. Operational closure occurred in September 1995. For NAS Glenview, the final property transfer date has been set for 1999 when environmental cleanup is expected to be completed. Libertyville will follow in 2001. A BRAC Cleanup Team (BCT) was formed in 1993 for NAS Glenview and the

Libertyville Training Site (LTS). A Local Reuse Authority (LRA) was established for each property and each has published a reuse plan that specifies a mixture of industrial, commercial, recreational, and residential uses. Since NAS Glenview has already closed, and the Reuse Plan does not include an airfield scenario, a completely new utility and transportation infrastructure must be constructed. The Libertyville site has the same situation. Close coordination between the two LRAs (Villages of Glenview and Vernon Hills) and the BCT allows priority areas to be identified and addressed in cleanup plans. As a result, key areas can be turned over to the respective LRA as expeditiously as possible.

There are a total of 43 sites at the bases. 33 CERCLA sites and two UST sites are at Glenview. seven CERCLA sites and one UST site are at Libertyville. Three of the CERCLA sites (Sites 4, 19, and 20) at Glenview are proceeding under the Environmental Restoration Navy Account, with the rest proceeding under BRAC. These three sites will be transferred to NTC Great Lakes which is taking receivership of some housing areas. Non-Time Critical Removal Actions at Glenview are in the planning phase for a ditch in Site 00010 (High Semi-Volatile Organics), the indoor firing range Site 00019 (Lead), the Golf Course Maintenance Shack Site 00028 (Pesticides), the pool dump site 00031 (buried waste), and former Fire Fighting Training Areas, Sites 00001 and 00025 (SVOCs).

In FY96 and FY 97, all petroleum product underground storage tanks at NAS Glenview were removed. Final closure documentation reports are in various stages of completion. Three tanks have No Further Action Determination letters from the Illinois EPA. A Finding Of Suitability to Transfer (FOST) has been signed for the Golf Course and the Airfield Parcels. In partnership with the Local Reuse Authority (LRA), the Navy avoided approximately \$500,000 in demolition and disposal costs by suggesting the LRA conduct their concrete recycling pilot project in an area where the Navy would have to remove concrete apron area for soil remediation. Once the concrete was removed, contaminated soils under the airfield pavement were then removed. The resulting excavation was then backfilled with free clean soil excavated from an area of the base designated for the construction of a lake as part of the future reuse plan. This resulted in a win-win situation for the community, who had less soil to dispose of, as well as the Navy, and netted another \$780,000 in cost avoidance.



## GLENVIEW NAS RELEVANT ISSUES

### ENVIRONMENTAL RISK



**HYDROGEOLOGY** - Glenview NAS is located in the Chicago Lake Plain, a low, flat surface sloping gently towards Lake Michigan. Surface drainage on the station is primarily toward a tile drainage system installed under the runway area, which diverts the water toward an oil/water separator retention basin. Water then exits the base via overland ditches and proceeds to the North Branch of the Chicago River. Surface migration of contaminants is a pathway of concern, since the river terminates in Lake Michigan, which is a drinking water supply. The geologic setting of the NAS Glenview region of northeast Illinois is typically characterized by a dolomite limestone bedrock, overlain by 100-120 feet of glacial till sediments. The till consists primarily of clay and silty clay interspersed with water saturated sand and gravel lenses which include occasional gravel pebbles and broken shale.

Groundwater in the area is found in four aquifers, one in the glacial material and the lower three in the bedrock formations. Groundwater in the glacial till is found in the saturated sand and clay lenses. Beneath NAS Glenview, these lenses are not continuous and are not a significant production source of potable water. Over 300 groundwater wells are located within three miles of the station and are used for drinking water, industrial, and agricultural purposes. These wells are developed into the various bedrock aquifers and no contaminants are known to have been detected in the wells to date. Based on environmental investigations, extensive groundwater remediation is not expected to be a part of the cleanup process at NAS Glenview.

One man-made pathway for groundwater contamination, an improperly abandoned well, was discovered on base. After significant investigation in the area of this well, the site was approved as requiring "No Further Action" by the BCT. There may be other undiscovered wells on base, from its past history as a farming and residential area, but none have been located or thought to be located at areas of past releases or disposal actions.

The geology of the Libertyville Training Site is characterized by a limestone bedrock, overlain by 110-130 feet of glacial till sediments, which consists primarily of clay and silty clay interspersed with water saturated sand and gravel lenses, which include occasional gravel pebbles and broken shale. In the LTS area, these lenses are not significant water production areas. The environmental investigations at the LTS have included the placement of 14 groundwater monitoring and sampling wells to a maximum depth of 55 feet. These wells did not encounter continuous and significant water bearing zones. Groundwater flow in the till and outwash is primarily to the southeast. Past groundwater water well monitoring has indicated minor contamination in the area of the wells. The contaminants identified in soils and groundwater include low levels of petroleum related contaminants (poly-nuclear aromatics, lead, chromium and arsenic). There are approximately 70 private wells within a one mile radius of the site. The wells are used for drinking water and agricultural purposes. The nearest private well is 700 feet from the site boundary.



**NATURAL RESOURCES** - Glenview is surrounded by densely populated residential areas to the southeast, south and southwest. To the west, northwest, and northeast are small industrial areas. Due to the highly developed nature of the area around the station and on the station, the only wildlife are those species that have adapted well to urban areas. Native species such as fox, coyote, muskrat, skunk, raccoon, weasel, opossum, woodchuck, various squirrels and rabbits, as well as birds, may still be present in the general area. The surface ditches and stormwater management ponds flowing off base provide habitat for migrating birds and waterfowl. Most of the vegetative cover consists of planted grasses, shrubs, and trees not native to the area. Since airfield operations have ceased, portions of the runway area have been discovered to contain high quality prairie remnants that are of great interest to the community. No Federal listed rare, threatened, or endangered species are known to inhabit the area. There are two State listed endangered plants (sedges) located on base property. Densely populated areas surround Libertyville on all sides except the north, which is an industrial park. The vacant 164-acre site has attracted the same species as those found at NAS Glenview, as well as deer.



**RISK** - A Baseline Risk Assessment following EPA guidelines will be conducted for NAS Glenview Sites 00003 (North Burn Area Landfill) and Sites 00001 and 00025 (Fire Fighter Training Areas). Risk assessments will be performed on sites that require investigations beyond site screening. An Ecological Risk Assessment was performed during sites screening for sites on the airfield. The findings indicate that risk to ecological habitat on base derives from surface water runoff areas. Those areas investigated during site screening have resulted in a finding of No Further Action due to a lack of ecological receptors. An inventory of biological resources compiled for the Environmental Impact Statement found no federal endangered or threatened species, nor habitat to support them. State of Illinois threatened prairie plants have been documented in the area of the airfield and a state threatened bird, a sandpiper has been observed; however, available habitat has been termed inadequate to support this species.

Under the DOD Relative Risk system, seven sites were ranked as high relative risk. five high ranked sites are at Glenview and two are at LTS.



**RESTORATION PROJECTS** - A portion of the base in the airfield area contains plants that are native to a prairie environment. The Reuse Plan calls for a park in that area in order to preserve this prairie remnant.

### REGULATORY ISSUES



**NATIONAL PRIORITIES LIST** - Glenview NAS did not qualify for the NPL and Libertyville Training Site has not been ranked.



**LEGAL AGREEMENTS** - There are no legal agreements at either site.



**PARTNERING** - Formal facilitated partnering with Region V and Illinois began in the fall of 1996.

### COMMUNITY INVOLVEMENT



**RESTORATION ADVISORY BOARD** - A Technical Review Committee for Glenview was formed to address the Site investigation that began in 1989. However, the TRC was not active at the time of BRAC closure legislation. A newly formed Restoration Advisory Board (RAB) was created around the core of the former TRC members. The RAB (24 members) was formed in May 1994 and initially met every month, though now it meets quarterly. The RAB has received training/presentations on risk assessment, environmental baseline surveys, underground storage tank program, and CERCLA requirements. The RAB has reviewed several documents including the BRAC Cleanup Plan (BCP), Environmental Baseline Survey (EBS), UST efforts, FOSLs, FOSTs, and Site Investigations. The RAB has provided community input on sampling results. In FY96, the RAB approved the community relations plan as well as provided comments and preferences on natural/historical preservation ideas, historical data, and sampling and analysis plans/data.

There was no TRC established for Libertyville. A RAB was started in May 1994 and meets quarterly. The Libertyville RAB has eight community members and has selected a community co-chairperson. The Libertyville RAB has had training/presentations on CERCLA and background sampling methods. The Libertyville RAB has reviewed documents including the BCP, EBS, background soil and groundwater sampling plan, and the UST Remedial Workplan. In FY95, the Libertyville RAB conducted a community survey. The survey questioned residents about knowledge of environmental issues at the site, their personal concerns about Libertyville, and their preferred methods for feedback. The survey indicated that there was a high level of trust for the Navy's environmental restoration incentives. It also indicated fact sheets, local media, and public meetings were the preferred information communication tools, and that the top concern was the schedule for final cleanup and reuse.

## GLENVIEW NAS RELEVANT ISSUES



**COMMUNITY RELATIONS PLAN** - A Community Relations Plan (CRP) was prepared for Glenview in July 1995. For Libertyville the Community Relations Plan was prepared in July 1993 and will be updated in 1998.



**INFORMATION REPOSITORY** - A publicly available Information Repository was established in 1994 at Glenview and Northbrook public libraries. Northbrook library has since been discontinued due to lack of use. Libertyville Information Repositories are located at the community hall and local libraries.

### BASE REALIGNMENT AND CLOSURE



**BRAC** - The Base Realignment and Closure (BRAC) committee recommended NAS Glenview and the Libertyville Training Site for closure in 1993, during the BRAC III round. The mission cease date was March 1995 and operational closure occurred in September 1995. The final property transfer date has been determined to be the end of FY 1999 for Glenview and FY 2001 for Libertyville.



**BRAC CLEANUP TEAM** - A BRAC Cleanup Team (BCT.) was formed in October 1993 and membership includes the Navy, Illinois Environmental Protection Agency, and EPA Region V. The BCT is for both the Glenview property and the Libertyville property. The BCT is supported by the Caretaker Site Office Staff, EFA Midwest (Libertyville) and SOUTHNAVFACENGCOM personnel. The BCT works closely with the Local Reuse Authorities to ensure that the cleanup strategies are compatible with the reuse plans.



**DOCUMENTS** - A BRAC Cleanup Plan was completed in February 1994. The Environmental Baseline Survey was conducted in October 1993 and the final report published May 1994. The present environmental condition of property that is being transferred to non-federal ownership is shown below:

Environmental Conditions of Property Classification						
1	2	3	4	5	6	7
1 acre	100 acres	715 acres	101 acres	41 acres	43 acres	206 acres



**LEASE/TRANSFER** - One hundred and twenty acres have been leased on the Glenview property, 109 of which (golf course) is suitable for transfer. A deed for 546 acres of airfield area was transferred to the Village of Glenview in September 1997. The golf course is scheduled to transfer in late 1997.



**REUSE** - A Reuse committee for Glenview was formed in August 1993 and has 25 members. A reuse plan for Glenview has been published in June 1995 which identifies a mixture of uses such as industrial and residential. A reuse committee for Libertyville was formed in 1994. A reuse plan for Libertyville was published in April 1995 in which the Federal Aviation Administration (FAA) requested a large portion of the property for use as a radio navigation range. The competing parties interested in the property, the FAA and the Village of Vernon Hills, are still negotiating use.



**FAST TRACK INITIATIVES** - The BCT developed risk-based contaminant screening criteria to accelerate future risk decision making. The BCT developed a comprehensive Quality Assurance Project Plan that accelerated investigations by providing pre-approved sampling method and procedures as well as analytical methods. This resulted in considerably less detailed workplans for subsequent work and thus compressed review times. This allowed the majority of site screening to be completed in two years.

It was known that none of the Underground Storage Tanks (USTs) would be reused after base closure. Also, some tanks were known to have leaked. Rather than pull tanks and come back later for soil cleanup if there were signs of releases, the Navy used a Cost Contract to pull tanks and begin removal of impacted soil in one mobilization. Once the contractor's workplan was approved, work could start in the field and continue until the last confirmation soil sample was tested and shown to meet cleanup objectives.

Early on in the environmental study and cleanup process, the BRAC Cleanup Team initiated meetings with the Local Reuse Authority (LRA). This communication allowed the BCT to coordinate its work with the new infrastructure development plans of the LRA, thus allowing the most urgent areas to be cleared for transfer before other areas of the base property. This communication also resulted in mutual cooperation to save the Navy and LRA money. The LRA infrastructure development plans created some excess amounts of soil that they would have to transport or try to sell. The Navy would need a large amount of soil to backfill some massive UST excavations. The LRA allowed the Navy to obtain some of its backfill soil from areas of the base that the LRA would later have to excavate. The BCT tested and cleared the borrow-site before allowing the Navy to use it. Using free soil backfill from on-site sources saved \$780,000 versus using off-site sources. Also, by allowing the Village of Glenview to demonstrate a concrete recycling project on an area where the concrete needed to be removed in order to get access to a leaking fuel line, the Navy saved an additional \$500,000. The BCT established screening methods to allow the concrete to be removed from areas of suspected petroleum product releases before the pilot project was begun in the field.

## HISTORICAL PROGRESS

### FY88

**Sites 1-6 (Glenview)** - An Initial Assessment Study (IAS), equivalent to a Preliminary Assessment (PA) was completed which identified six potentially contaminated sites on Glenview NAS. All six sites were recommended for further investigation in a Site Inspection (SI).

### FY89

**Sites 1-9 (Glenview)** - A Site Investigation performed in 1989 increased the number of identified sites to 9.  
**Sites 1-7 (Libertyville)** - An Environmental Evaluation was completed in April which recommended further study for all seven sites.

### FY90

**Sites 1-9 (Glenview)** - The Site Inspection (SI) work plan was finalized in April.

### FY92

**Sites 1-9 (Glenview)** - A Site Inspection (SI) was completed which recommended Sites 1, and 3 should proceed to a Remedial Investigation (RI) phase. An extended SI should be conducted for Site 5 and 9, Sites 6 and 7 should be further investigated under the UST program, Sites 2, 4, and 8 require no further investigation, and surface water and sediment areas warrant further investigation.

**USTs 1 and 2 (Glenview)** - An Initial Site Characterization study was completed. Evidence of product leak was found around several tanks at both sites. A work plan for Contaminant Assessment Reports (CAR) was prepared.

**Sites 1-7 (Libertyville)** - A Removal Plan was completed in July for the removal of asbestos and lead contaminated material from five of the seven areas. A Remedial Investigation (RI) work plan was under development for the seven sites covering both soil and groundwater contamination.

## GLENVIEW NAS HISTORICAL PROGRESS

### FY93

**(Libertyville)**

Environmental Baseline Survey for Glenview and Libertyville began.  
One leaking tank was removed and remediated

Sites 1, 3, 25 and 26 - Initiated RI/FS  
Sites 11-18, 21-27, 30 - Initiated PA/SI  
Site 8 - Completed PA/SI and site is RC.  
UST 1- Tank removal project and soil cleanup for all tanks at Glenview was begun.  
UST 3 (Libertyville) - Initiated the Site Assessment (SA)

### FY94

Sites 1-5 (Libertyville) - Removal actions were completed at five Libertyville sites to remove asbestos containing material.  
Sites 1-30 (Glenview) - Initiated sampling and screen of potential areas of concern to determine the extent of contamination.

### FY96

Glenview  
Sites 28, 29 and 31 - Initiated PA/SI to characterize contamination; with completion planned for 1997.  
Completed Gray Site Sampling. Significant portions of the airfield have been reclassified as suitable for transfer.  
UST 1 - Continued removal of all tanks at NAS Glenview. Contaminated soil was removed as well, wherever it was found.

### FY95

**Glenview**

Continued investigation of Gray Sites. Background Soil and Groundwater investigation completed.

## PROGRESS DURING FISCAL YEAR 1997

### FY97

**Glenview**

Sites 4-6, 9, 11, 13, 14, 16-18, 20, 21, 24-29, 31, and 32 - Completed SI.  
Sites 1, 2, 3, 25, 28, 29, and 30 - Initiated RI.  
Sites 1, 3, 10, 15, 25, 28, and 31 - Initiated IRA's.

UST 01 - Removed all UST's and contaminated soil.  
Libertyville  
Sites 1,2,3,4,5,6, and 7 - Initiated Expanded Site Investigations.  
Site UST 03 - Geotechnical survey to locate tank locations completed; workplan completed.

## PLANS FOR FISCAL YEARS 1998 AND 1999

### FY98

**Glenview**

Further site screening will be completed to identify which areas are available for transfer and which need further action. Removals are planned for sites warranting further action to expedite the process of site restoration. The RI sites will be considered for removals where action is required to expedite their transfer.

Sites 10, 12, 22, 30, and 125 - Complete SI.  
Site 10 - Initiate RI.  
Sites 1 and 3 - Complete RI.  
Sites 5, 22, 23, 29, and 125 - Initiate IRA's.

**Libertyville**

Site UST 03 - Complete UST and contaminated soil removals.  
Sites 1, 2, 3, 4, 5, 6, and 7 - Complete Expanded Site Investigations.  
Sites 3, 4, 5, and 6 - Initiate RI.  
Sites 1, 4, 6, and 7 - Initiate IRA's.

### FY99

**Glenview**

Sites 7 and 15 - Complete SI.  
Sites 25, 28, 29, 30, and 31 - Complete RI.  
Sites 1, 3, 15, 22, 25, 28, 29, 30, 31, and 125 - Complete IRA's.

**Libertyville**

Sites 1 and 5 - Complete RI.  
Sites 3 and 6 - Initiate IRA's.

**GLENVIEW NAS  
PROGRESS AND PLANS**

<b>CERCLA</b>	<b>FY96 and before</b>	<b>FY97</b>	<b>FY98</b>	<b>FY99</b>	<b>FY00</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03 and after</b>
PA / SI	13	16	7	2				
RI / FS		14	7		1			
RD		1						
RAC		1	2					
RAO								
IRA	7(7)		9(9)	10(10)	7(7)			
RC	1	20	14	2	1			
Cumulative % RC	3%	55%	92%	97%	100%	100%	100%	100%
<b>UST</b>	<b>FY96 and before</b>	<b>FY97</b>	<b>FY98</b>	<b>FY99</b>	<b>FY00</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03 and after</b>
SA	2		1					
CAP	1							
DES								
IMP		1						
IMO								
IRA								
RC	1	1	1					
Cumulative % RC	33%	67%	100%	100%	100%	100%	100%	100%

# GREAT LAKES NAVAL TRAINING CENTER GREAT LAKES, ILLINOIS



Engineering Field Division/Activity: SOUTHDIV  
 Major Claimant: CNET  
 Size: 1,650 Acres  
 Funding to Date: \$3,582,000  
 Estimated Funding to Complete: \$14,785,000

**Base Mission:** Provides basic training for enlisted personnel, and initial skill, advanced, and other specialized training for Navy and Reserve officers and enlisted personnel

**Contaminants:** Paint, pesticides, POLs, heavy metals, solvents, unexploded ordnance, dredge spoils, industrial liquid waste, PCBs

**Number of Sites:**

CERCLA: 15  
 RCRA Corrective Action: 0  
 RCRA UST: 5  
 Total Sites: 20

**Relative Risk Ranking of Sites:**

High: 2 Not Evaluated: 4  
 Medium: 5 Not Required: 8  
 Low: 1

Sites Response Complete: 8	

## PROGRESS AND PLANS

CERCLA	FY96 and before	FY97	FY98	FY99	FY00	FY01	FY02	FY03 and after
PA / SI	13		1	1				
RI / FS	1				1			6
RD								5
RAC								5
RAO								4
IRA	3(3)	1(1)		1(1)	1(1)			
RC	7			1	1			6
Cumulative % RC	47%	47%	47%	53%	60%	60%	60%	100%
UST	FY96 and before	FY97	FY98	FY99	FY00	FY01	FY02	FY03 and after
SA	5							
CAP								4
DES	1							4
IMP	1							4
IMO								1
IRA	1(1)		4(4)					
RC	1							4
Cumulative % RC	20%	20%	20%	20%	20%	20%	20%	100%