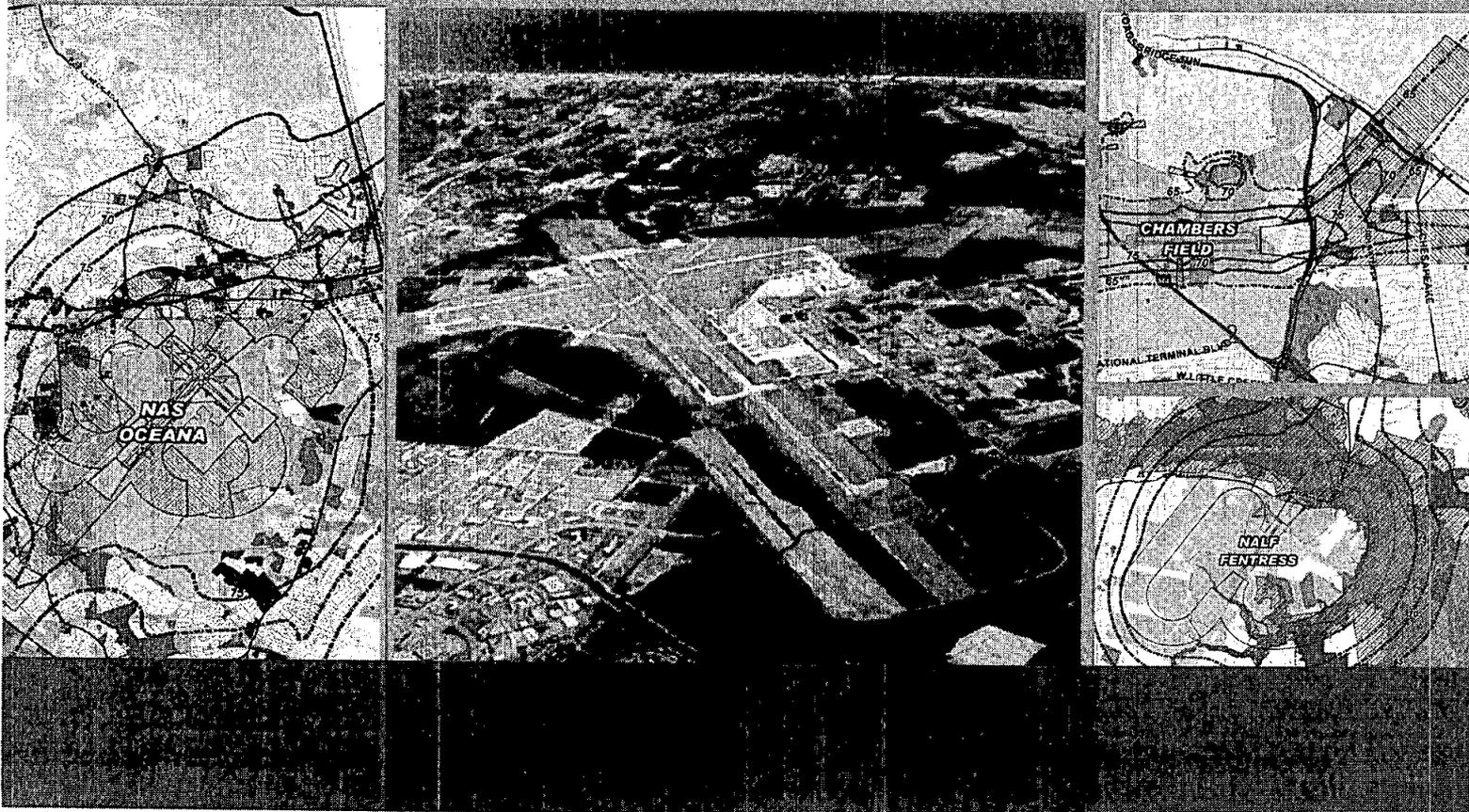


Executive Summary

Hampton Roads

Joint Land Use Study



PREPARED FOR
Hampton Roads Planning District Commission

PREPARED BY
EDAW, Inc.
Kerr Environmental Services Corp.
Vanasse Hangen Brustlin, Inc.
The Miles Agency

APRIL 2005

EDAW

DESIGN, PLANNING AND ENVIRONMENTS WORLDWIDE

1948

1949

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1955

Executive Summary

The cities of Chesapeake, Norfolk, and Virginia Beach have partnered with the U.S. Navy to conduct the Hampton Roads Joint Land Use Study (JLUS). The study explores opportunities to reduce noise impacts on communities surrounding NAS Oceana, NALF Fentress, and Chambers Field while accommodating necessary growth and maintaining regional economic sustainability. Balancing community interests with the military mission in Hampton Roads is the goal of this JLUS, with local policies recommended for jurisdiction implementation to achieve this balance.

The three military airfields that are part of this JLUS contribute billions of dollars annually to the regional economy, making these installations crucial elements of the community fabric. As major contributors to the economy and military mission of the U.S. Navy alike, the operations of these airfields are critical to maintain at levels necessary to train pilots for their assigned missions.

Active airfields have been part of the landscape in Hampton Roads since the early 20th century. The growth of communities surrounding these military assets began affecting operations decades ago, spurring initial efforts at partnership between the military and jurisdictions to control growth. Past efforts have targeted land use policy and densities, responding to Navy guidance on compatible densities and land use types around the installations. Increasing growth in the recent past, however, has necessitated an updated assessment of how well the current policies are managing growth and community quality of life within the vicinity of the airfields.

Using the Navy Air Installation Compatibility Use Zone (AICUZ) policy as the guide for land use decisions, the assessment of jurisdiction policies and future military operations focuses on minimizing additional community impacts through guiding incompatible uses away from active airfields. Generating the most concern with encroaching community development is land use policy around NAS Oceana, the Master Jet Base for the eastern United States.

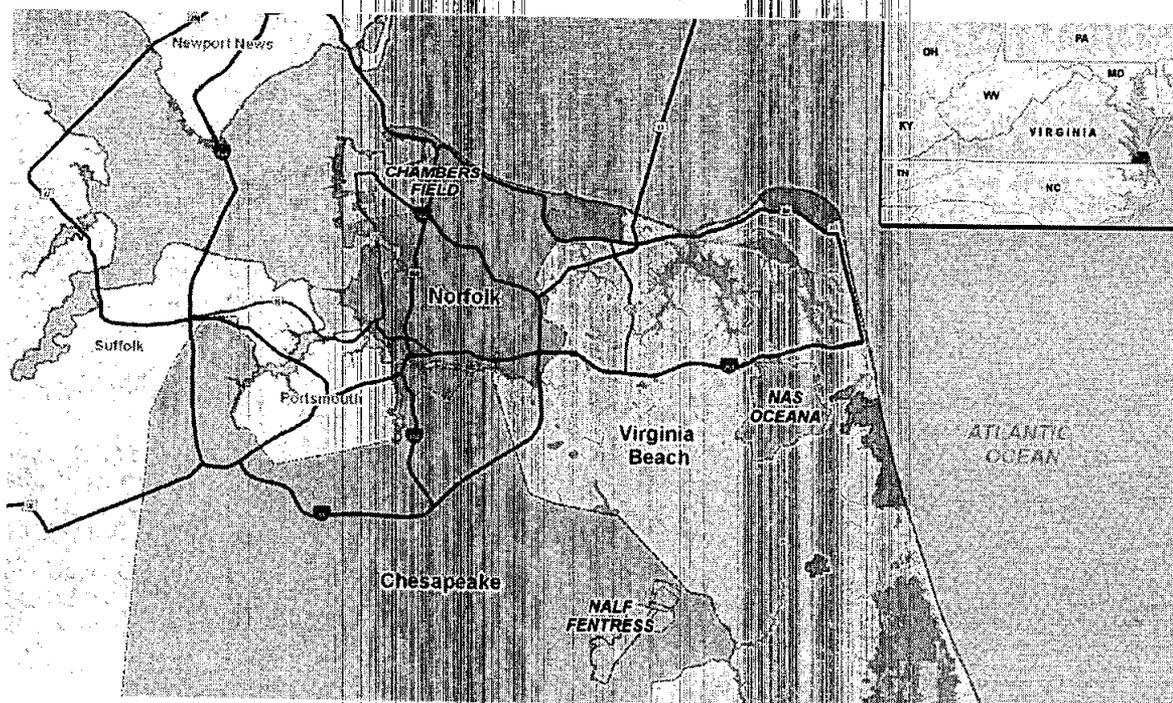
Large scale development within the vicinity of NAS Oceana began in the City of Virginia Beach over 30 years ago. Since the dialogue on land use

compatibility/development between Virginia Beach and the Navy began in the 70s, development has been proposed and approved within areas the Navy disagrees should be developed. In other cases, the City has modified or rejected development proposals to address the Navy's concerns. Conflicts have repeatedly arisen over land use proposals between the two parties. Varying planning and land use policies were adopted by the City to address this problem. The differences between the two parties became more pronounced during the basing decisions for the F/A-18 E/F Super Hornets and new Navy regulations about AICUZ land use compatibilities during 2002 and 2003. This JLUS effort in 2004-5 is a direct consequence of these differing attitudes towards development in NAS Oceana's AICUZ.

Development around NALF Fentress has been less intense over the years. While compatible development is still essential to maintain military operations, existing Navy easements, jurisdiction land use policies, and natural constraints to development have limited major encroachment around the airfield.

At Chambers Field at Naval Station Norfolk, development existed around the airfield prior to jet aircraft and modern air operations starting at the base. This development, although incompatible with current Navy regulations in certain areas, is stable and unlikely to change significantly in the near future. Very little vacant or undeveloped land remains in the AICUZ.

Navy Airfields in Hampton Roads



Recommendations of this JLUS focus on specific policies to address land use, noise, and economic concerns of the surrounding communities. Some tools are applicable to all three jurisdictions in the study, while some are pertinent to a specific city and its constituency. The goal of these tools is to create a uniform planning policy environment around the installations to help prevent future growth incompatible to continuing military operations.

The tools seek a balance among these diverse interests by stressing:

- the feasibility of implementation;
- the ability to sustain the economic health of the region and protect individual property rights;
- the protection of the critical military missions performed by NAS Oceana, NALF Fentress, and Chambers Field; and
- the protection of the health, safety, welfare, and overall quality of life of those who live and work in the Hampton Roads region.

Tools recommended at both the regional and jurisdiction level can be categorized into eight primary categories. These groupings represent key issues surrounding the protection of the existing quality of life and military operations:

- Coordination/Organizational
- Communications/Information
- Sound Attenuation
- Real Estate Disclosure
- Planning and Public Policy
- Land Use Regulation
- Acquisition
- Military Operations

The matrix below provides a summary of the agreed-upon tools resulting from this JLUS that are recommended for the region, Navy and each jurisdiction.

In addition to these policy tools, a JLUS Sub-Committee was formed in February 2005 to focus on AICUZ and land use issues in the City of Virginia Beach, primarily around NAS Oceana. This Sub-Committee produced a Statement of Understanding between the City and the Navy with a number of suggested actions to reduce potential conflicts. (The complete Statement of Understanding is available from the City and

included as an Appendix to the JLUS report.) These are summarized as follows:

- The City of Virginia Beach would create a new process for Navy officials to review and comment earlier in the process on proposed development in the AICUZ.
- The City would ask sponsors proposing development that might be incompatible with the Navy's AICUZ guidelines to meet with Navy officials to discuss alternatives.
- The City would consider fundamental changes in the zoning ordinance to substantially reduce the number of residential units allowed by current zoning in the Resort Area.
- The City would adopt a Zoning Overlay District in all noise zones greater than 65 dB DNL to help prevent encroachment at NAS Oceana.
- The City would recognize the importance of NAS Oceana's Interfacility Traffic Area in the City's Transition Area by:
 - retaining agricultural zoning of one residential lot per 15 acres in the 75 dB DNL and above noise zone;
 - amending the Comprehensive Plan to retain agricultural zoning with residential density not to exceed one dwelling per five acres in the 70-75 dB DNL noise zone, as allowed by a conditional use permit; and
 - limiting density to one dwelling per acre in the 65-70 dB DNL noise zone.
- Based on legislation recently passed by the General Assembly, sound attenuation laws would be expanded to certain non-residential uses and disclosures of noise and/or accident potential zones would be improved for the sale or lease of residential units.
- The City would initiate a working group with NAS Oceana to work with the Virginia Real Estate Board to review, and possibly revise, all disclosures currently in use for noise and/or accident potential zones and determine where disclosures might be needed where none are used now.
- The City would keep the Navy effectively involved in future planning processes for proposed transportation improvements in the AICUZ.
- The City would continue to include the Navy as a vital stakeholder in revising the Oceanfront Resort Area Concept Plan.
- The City would strengthen its working relationship with the Navy and create an ongoing, open dialogue to address the Navy's concerns about potential encroachment at NAS Oceana.

Implementation of these recommendations would result in a decreased level of community impacts from noise, increased community understanding of military operations, and continuing progress towards managing incompatible growth near the Navy's airfields. The standardization of policy tools across the cities would result in a regional approach to cooperation between jurisdictions and the military. An on-going JLUS Regional Coordinating Committee could oversee this coordination and monitor implementation of this JLUS and other related planning efforts. The desired end result is an increased quality of life and continued military presence in Hampton Roads for future decades.

Future Noise / Land Use Policies : Regionwide

Topic	Proposed Tools	Definition	Implementation Responsibility
Communications/ Information	Improve communications through updated web sites	Provide JLUS information and any other relevant AICUZ or related land use/noise conflicts information on jurisdictions websites. Update information on a regular basis.	Jurisdictions (in cooperation with Navy)
	Request FAA briefing on possible application of FAR Part 150	FAA Part 150 may have noise impact mitigation and other measures applicable to Navy airfields. Request FAA to provide briefing in potential applications for HR jurisdictions.	FAA and Jurisdictions (Virginia Beach)
	Strengthen public education regarding safety and noise restrictions in existing Airport Noise Ordinances	Educate public on existing AICUZ policy which recognizes noise, safety, height, land use and other restrictions around military airfields.	Jurisdictions
Coordination/ Organizational	Create JLUS Regional Coordinating Committee to include the Peninsula's military facilities and local governments	Multi-stakeholder committee which will continue dialogue and monitoring of JLUS recommendations and future land use impacts	HRPDC, Jurisdictions, Navy, Army, Air Force, Coast Guard
Planning and Public Policy	Seek Navy input on school siting boards/decisions	Consult Navy on school siting decisions to review future school sitings in all three jurisdictions.	Jurisdiction School Boards, Navy
Real Estate Disclosure	Early real estate disclosure	Disclosure of structure's location within AICUZ noise zones and/or within APZs at the initial advertisement of property (e.g., Multiple Listing Service database). Ensure early disclosure is being followed and educate agents of proper language/timing.	Jurisdictions, VA Real Estate Board, HR Realtors Association, HR Assoc. of Commercial Real Estate
Sound Attenuation	Strengthen building codes	Modify existing STC ratings for sound attenuation to higher levels based on application by other jurisdictions; tier application of expanded codes according to noise contours	Jurisdictions, State Representatives in Legislature, Navy
	Strengthen building codes of schools in noise contours	Improve sound attenuation of school structures based on applications by other jurisdictions	Jurisdictions, State Representatives in Legislature
	Implement noise attenuation requirements for certain non-residential structures	Conduct research to implement recently-enacted state legislation enabling Hampton Roads communities ability to require noise attenuation for certain non-residential noise-sensitive structures (churches, office buildings, hospitals, etc.)	Jurisdictions, VA Board of Housing & Community Development
	Ensure building code enforcement	Ensure contracted builders are following increased standards in noise contours	Jurisdictions, Tidewater Building Association
	Building code R&D in Hampton Roads	Promote research and development on new methods of sound attenuation through construction and building materials	Jurisdictions, Tidewater Building Association, Local Educational Institutions, Local/National Building Material Retailers

Future Noise / Land Use Policies : Navy

Topic	Proposed Tools	Definition	Implementation Responsibility
Communications/ Information	Improve Navy communications through updated web sites and hotline response	Improvement of communication methods of Navy activities to public	Navy (in cooperation with jurisdictions)
	Update educational materials explaining noise, AICUZ, and real estate disclosure	New brochures (with AICUZ maps) discussing specifics of noise contours, AICUZ, and Navy operations	Navy (in cooperation with jurisdictions)
Planning and Public Policy	Enforce development restrictions on existing easements	Enforce development restrictions on existing easements to ensure AICUZ compatible development around airfields	Navy (in cooperation with jurisdictions)
	Pursue OLF in North Carolina	Pursue additional Outlying Field to allow additional flight training in undeveloped areas outside of Hampton Roads	Navy, DOD, Congressional representatives
Acquisition	Pursue funding for DoD Conservation Land Purchase	Partnerships with local, state, and non-profit conservation entities to acquire land around military installations to prevent further encroachment	Navy, DOD, Jurisdictions, partner entity
Air Operations/ Training	Flight Ops modifications	Implement/continue all flight ops modifications feasible to reduce air ops to minimal feasible to support mission over HR developed areas (e.g., NAS Oceana Course Rule Changes implemented 3/1/04)	Navy

Future Noise / Land Use Policies : City of Norfolk

Topic	Proposed Tools	Definition	Implementation Responsibility
Land Use Regulations	Expand/Modify Airport Safety Overlay District	Expand/modify existing Overlay District to encourage AICUZ-compatible development in addition to those present in the baseline zoning classification. The Overlay District cannot prohibit any development allowed under the baseline classification. District is created around boundaries of noise contours and safety areas.	Jurisdiction
Acquisition	Establish a Voluntary Property Acquisition Program	Implement program, as determined feasible, to acquire existing properties within Clear Zones of Chambers Field	Jurisdiction

Future Noise / Land Use Policies : City of Chesapeake

Topic	Proposed Tools	Definition	Implementation Responsibility
Planning and Public Policy	Revise ordinance regarding clustering provisions	Implement revision of ordinance to encourage AICUZ-compatible clustering of density	Jurisdiction
Land Use Regulations	Expand Fentress Overlay District within existing Zoning Ordinance	Include land use restrictions on lands within APZs and all noise contours rather than primarily 75+ DNL	Jurisdiction
	Implement Comprehensive Plan to support integrated preservation planning policies	Implement Comprehensive Plan to synchronize the City's rural preservation efforts which control development densities in the AICUZ	Jurisdiction
Acquisition	Establish Avigation Easement Program	Create program for jurisdiction to offer avigation easements as part of proffer or other special permitting processes for proposed new development in the AICUZ	Jurisdiction

Future Noise / Land Use Policies : City of Virginia Beach

Topic	Proposed Tools	Definition	Implementation Responsibility
Planning and Public Policy	Establish a Redevelopment Strategy	Advance public understanding of redevelopment options and create voluntary and incentive-based tools to affect community goals	Jurisdiction
Land Use Regulations	Revise City Zoning ordinance to include AICUZ Overlay District	Establish AICUZ Overlay District to protect public health, safety & welfare and prevent encroachment that would degrade military operations at Navy airfields (Overlay District to be based on 1999 AICUZ map). Implementation actions to establish District would include appropriate comprehensive plan and related development regulatory changes.	Jurisdiction
Acquisition	Pursue purchase of impacted properties in the >70 DNL area of the Transition Area for open space	Assemble funding package of state, Federal and local funds to purchase from willing sellers affected property in the >70 DNL area of the Transition Area to convert to public open space	Jurisdiction (in cooperation with Federal, state and local agencies providing potential funding sources)
	Expand or modify land acquisition/protection programs in the Transition Area	Modify or expand existing Open Space, Agric. Reserve, and other acquisition programs to target funds for acquiring land within defined geographic corridor in Transition Area	Jurisdiction
	Seek Federal funding to purchase conservation lands	Working with other Hampton Roads communities, seek Federal funding to purchase conservation lands within AICUZ impacted zones	Jurisdiction (in cooperation with Federal agencies providing potential funding sources)
	Establish Avigation Easement Program	Create program for jurisdiction to offer avigation easements as part of proffer or other special permitting processes for proposed new development in the AICUZ	Jurisdiction

The Virginian-Pilot

FRIDAY
MAY 23, 1986

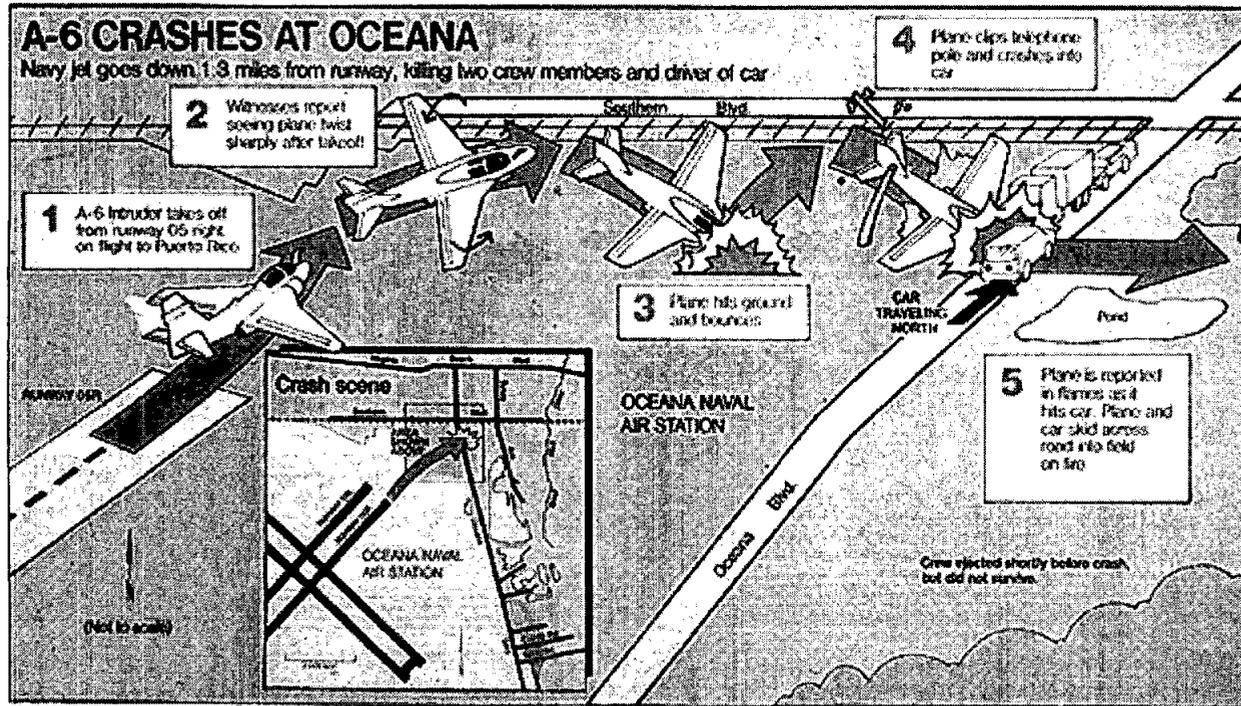
The Virginian-Pilot

Norfolk, Portsmouth, Virginia Beach, Chesapeake and Suffolk

121st Year, No. 155

25 CENTS

A-6E crash kills motorist, 2 fliers



By THOMAS HOLDEN and MICHAEL BASS
Staff writers

VIRGINIA BEACH — Two Navy flight officers and a pregnant woman were killed Thursday when an A-6E Intruder crashed into a station wagon on Oceana Boulevard and exploded.

It was the first crash at Oceana Naval Air Station to involve a civilian death, said A.C. Ewers, a base spokesman.

The woman was identified as Tammy Fowler, 25, of the 1400 block of Chickadee Lane in the Redwing subdivision. She was three months to four months pregnant, a Virginia Beach Police Department spokesman said.

She was the wife of David Fowler, a sailor based in Norfolk, said Ruth Noonan, a family friend, at the Fowler home.

Noonan said that the couple had a 7-year-old child and that the woman had worked for an optical company.

The pilot of the jet, which was taking off from Oceana, was identified as Lt. James P. Hoban, 20, of Riverdale, N.J. Hoban was married but it was not known whether he had children.

The bombardier was Lt. Michael F. Wilson, 27, of Medford Lakes, N.J. He was single.

All three bodies were charred beyond recognition, authorities said. Officials of the medical examiner's office were looking for Fowler's dental records to make a positive identification.

The servicemen's remains were taken to Portsmouth Naval Hospital.

The jet, en route to the Roosevelt Roads Air Station in Puerto Rico, felled trees and crashed in a field west

INSIDE

The crash of a Navy jet off Oceana Naval Air Station runway brings to 16 the number of East Coast fliers killed in A-6 Intruder accidents in 17 months. **A-6E**

Please see **CRASH**, Page A10

THE LEDGER-STAR

★METRO
75 CENTS

Norfolk, Portsmouth, Virginia Beach, Chesapeake and Suffolk, Va.

100th Year, No. 249

Crash emphasizes Oceana dangers

Navy pleas on growth ignored

By MARC DAVIS
Staff writer

VIRGINIA BEACH — Most weeks, Lt. Cmdr. Al Petrie shows up at City Council meetings with a message for the council: Please don't allow construction around the Oceana Naval Air Station.

Most weeks, the City Council has chosen not to act.

"We're not as effective as we'd like to be," Petrie said.

But the crash Thursday of a Navy A-4J jet bomber that slammed into a car and killed the driver just outside the Oceana base tragically underscored Petrie's point — that it can be dangerous around the airfield.

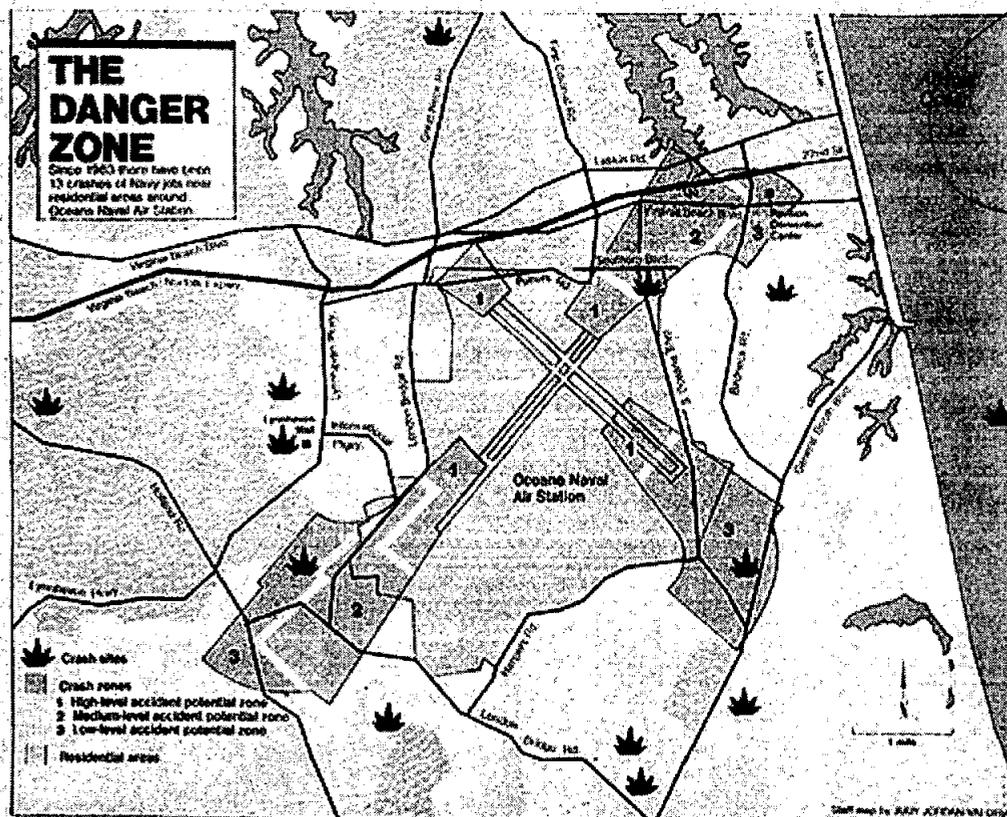
"I would hope it would bring the point home," Petrie said after the crash. "I just don't know. God, I would hope so. I really hope so."

The crash occurred on Oceana Boulevard in a barren, undeveloped area. But there are many areas around Oceana filled with dense residential and commercial developments, areas in which a jet crash could create tragedy on a massive scale.

It is Petrie's job to lobby against that kind of development.

To prevent crowding around its airfields, the Navy began a policy 11 years ago of buying air rights over nearby properties. Those areas are called AICUZ zones — air installations compatible use zones.

AICUZ maps define the noisiest areas. They also define areas in which accidents are most likely to occur. Those areas are called accident



Pilot skims over neighborhood, ejects at last moment, parachutes to safety.

BY MIKE ABRAMS AND BILL REED
STAFF WRITERS

VIRGINIA BEACH — A civilian pilot was described as a hero Friday morning after he diverted his faltering jet onto a field at Oceana Naval Air Station, narrowly averting disaster in a nearby neighborhood.

He ejected from his Saab F-35 Draken seconds before it crashed,

and his parachute appeared to open just above power lines, witnesses said. The pilot then gingerly walked toward the downed plane under his own power, waving off help from construction workers and passers-by who slid frantically through barbed wire in rushing to his aid.

The pilot's name was not released by late afternoon Friday,

as authorities worked to notify his family in California. He was treated for minor cuts and bruises at

down while landing. The pilot and radar-intercept officer ejected safely, but a Navy rescue crewman

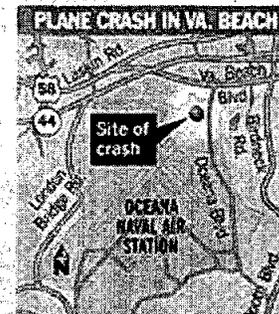
Crash: Pilot manages to avoid nearby homes

Continued from Page A1

The pilot had declared an in-flight emergency and was attempting to land at Oceana.

The Draken aircraft is a high-speed jet that pulls targets or serves as a target itself for surface ship and air combat exercises. Flight Test Dynamics operates the plane under a subcontract with Flight International Inc. of Newport News.

Jim Merizan, president of Flight Test Dynamics, answered few



helpers to leave the base. "He said, 'Get out of here before you get in trouble.'" Ross recalled.

Rescue crews arrived quickly. Stuart Mallory, who has lived nearby in the 100 block of Oceana Blvd. since 1951, was at home at the time of the crash and heard what he thought was an explosion. His wife and his niece had just left by car on an excursion to Pungo and missed driving under the descending aircraft by about two vehicle lengths, he said.

The first public reports on the crash had occurred in the area, either at the base or toward

6/27/98 - The Virginia Pilot



PHOTO BY THE VIRGINIA PILOT

Oceana Naval Air Station officials converge on the scene of the crash, near Oceana and Southern boulevards, on Friday. The pilot,

apparently fearing his aircraft might explode, waved off help from passers-by who slid frantically through barbed wire to help him.

Civilian jet avoids houses, crashes at Oceana

ing falsely indicating had occurred in the area, either at the base or toward

ers Mallory has said, he has experienced crashes, not incidents. One of those occurred in 1966 when a Navy jet took off from the sky. Two people were killed, along with a woman who was in a station wagon that crashed onto her car on Oceana

by Mayfield contributed.

BRAC HISTORY

VIRGINIA

Base Closures and Realignments

(1988, 1991, 1993, and 1995)

1988	Cameron Station	CLOSE
1988	Defense Mapping Agency (DMA) site, Herndon	CLOSE
1988	Manassas Family Housing	CLOSE
1988	NIKE Norfolk 85 Housing	CLOSE
1988	Woodbridge Housing Site	CLOSE
1991	Army Research Institute, Alexandria	REALIGN
1991	Belvoir Research and Development Center, Ft. Belvoir	REALIGN
1991	Directed Energy and Sensors Basic and Applied Research Elements of the Center for Night Vision and Electro-Optics, Ft. Belvoir	REALIGN
1991	Harry Diamond Laboratory, Woodbridge	CLOSE
1991	Naval Mine Warfare Engineering Activity, Yorktown	CLOSE
1991	Naval Sea Combat Systems Engineering Station, Norfolk	REALIGN
1993	Air Force Data Processing Center 7th Communications Group, Pentagon, Arlington	CLOSE
1993	Bureau of Navy Personnel, Arlington (Including the Office of Military Manpower Management, Arlington)	REALIGN
1993	Data Processing Center Naval Air Station Oceana	CLOSE
1993	Data Processing Center Naval Supply Center Norfolk	CLOSE
1993	Data Processing Center Navy Recruiting	CLOSE
1993	Defense Logistics Agency Information Processing Center, Richmond	CLOSE
1993	Fort Belvoir	REALIGN
1993	Naval Air Systems Command, Arlington	REALIGN
1993	Naval Aviation Depot Norfolk	CLOSE
1993	Naval Electronic Systems Engineering Center, Portsmouth	CLOSE

1993	Naval Facilities Engineering Command, Alexandria	REALIGN
1993	Naval Mine Warfare Engineering Activity, Yorktown (Realign to Panama City, FL vice Dam Neck, VA)	REDIRECT
1993	Naval Recruiting Command, Arlington	REALIGN
1993	Naval Reserve Center, Staunton	CLOSE
1993	Naval Sea Systems Command, Arlington	REALIGN
1993	Naval Supply Systems Command, Arlington (Including Defense Printing Office, Alexandria, VA and Food Systems Office, Arlington, VA)	REALIGN
1993	Naval Surface Warfare Center - Port Hueneme, Yorktown Detachment, Virginia Beach (Naval Mine Warfare Activity)	REALIGN
1993	Naval Undersea Warfare Center - Norfolk Detachment	DISESTAB
1993	Navy Data Processing Center Naval Computer & Telecommunications Area Master Station, Atlantic, Norfolk	CLOSE
1993	Navy Radio Transmission Facility, Driver	CLOSE
1993	Tactical Support Office, Arlington	REALIGN
1993	Vint Hill Farms	CLOSE
1993	Planning, Estimating, Repair, and Alterations Center (Surface) Atlantic, Norfolk	DISESTAB
1993	Naval Electronics Systems Engineering Center Portsmouth	CLOSE
1993	Space and Naval Warfare Systems Command	REALIGN
1993	Office of the General Counsel (Navy)	REALIGN
1993	Office of the Judge Advocate General (Navy)	REALIGN
1993	Office of the Secretary of the Navy (Legislative Affairs, Program Appraisal, Comptroller, Inspector General,	REALIGN

	and Information)	
1993	Office of the Chief of Naval Operations	REALIGN
1993	Office of Civilian Manpower Management (Navy)	REALIGN
1993	International Programs Office (Navy)	REALIGN
1993	Combined Civilian Personnel Office (Navy)	REALIGN
1993	Navy Regional Contracting Center	REALIGN
1993	Naval Criminal Investigative Service	REALIGN
1993	Naval Audit Agency	REALIGN
1993	Strategic Systems Programs Office (Navy)	REALIGN
1993	Office of Naval Research	REALIGN
1993	Office of the Deputy Chief of Staff (Installations	REALIGN
1993	Office of the Deputy Chief of Staff (Manpower & Reserve Affairs), U.S. Marine Corps& Logistics), U.S. Marine Corps	REALIGN
1993	Marine Corps Systems Command (Clarendon Office)	REALIGN
1995	Fort Pickett	CLOSE
1995	Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering East Coast Detachment, Norfolk	CLOSE
1995	Naval Information Systems Management Center, Arlington	RELAIN
1995	Naval Management Systems Support Office, Chesapeake	DISESTAB
1995	Fort Lee	RELAIN
1995	Information Systems Software Center (ISSC)	CLOSE