



Mission Sustainability- Related Articles 10 September 2010

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ARIZONA



Incumbent El Mirage Councilman Cleveland faces runoff

by **Cecilia Chan** - Sept. 4, 2010 07:24 AM
The Arizona Republic

One contested El Mirage City Council seat will go to a runoff in November.

Incumbent Roger Cleveland, who was elected in 2006, will battle John Palladino for a four-year term in the general election, City Clerk Richard Saathof said.

According to the final count in the recent primary election, , the other two, four-year council seats now have clear winners - Joe Ramirez and James McPhetres, Saathof said.

Earlier announced winners were Lana Mook, who beat Mike Humes to succeed Mayor Michele Kern, who opted not to seek election. And Lynn Selby won over Hubert Flisyn for the two-year seat vacated by Councilman Bill Conner.

Councilman Adam Super decided not to seek re-election, and Councilman Ben Lewis withdrew from the race.

Mook, Selby, Ramirez, McPhetres and Palladino were all former board members of People of El Mirage. The grassroots group formed last year in response to the council's much-criticized stance on Luke Air Force Base, a \$2 billion-a-year economic engine in Arizona.

The council's actions included asking for \$400 million in federal compensation for perceived economic harm of shouldering most of the building restrictions put in place to protect the Glendale base from encroachment.

The council's efforts to raise concerns about the F-35's noise also proved unpopular with many in the community.

Luke is the Air Force's preferred site to train pilots on the next generation of fighter jets. An environmental impact study is expected to be released later this year, and the final decision is expected next spring.

HAWAII

Hawaii 24/7

September 6, 2010

Meeting Presents Info on Navy's Training and Testing in Hawaiian Waters

Baron Sekiya

The U.S. Navy held a public Scoping Meeting on Thursday (Aug 26) at Hilo High School on the current and future impact of military installations and training in Hawaii and California waters.

The meeting is a precursor to the Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for military training and testing in Hawaii and Southern California. The Draft EIS/OEIS is scheduled to be released in the Spring of 2012 and public comments for consideration in the draft will only be taken up until Tuesday (Sept 14).

Organizers of the Scoping Meeting allowed time for opposing comments to be heard from members of Malu 'Aina Center for Non-violent Education & Action, the Sierra Club along with other Hawaii residents. The comments were not part of the Scoping Meeting but were allowed to be heard.

Concerns by those opposed to present and future military training raised questions about the impact on marine mammals by the use of active sonar and presence of depleted uranium at Pohakuloa Training Area which is not a part of the EIS/OEIS. Protests about the war in the Mid-East and overthrow of the Hawaiian Kingdom were also voiced.

Mark Matsunaga, Environmental Public Affairs Officer, said the Navy no longer uses depleted uranium in its weapon systems. The meeting was for the public to be informed on what the Navy has been doing so the public can submit comments for the Draft EIS/OEIS.

NEVADA



Sep. 06, 2010

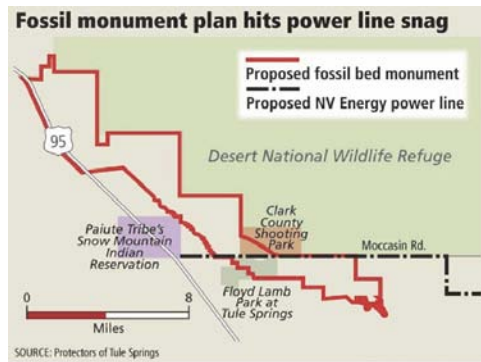
Air Force, fossil fans say hold power line

NV Energy power line conflicts with national monument plans

By KEITH ROGERS



Fossilized mammoth bones lie Wednesday on the surface of Upper Las Vegas Wash near Tule Springs on the northern outskirts of the Las Vegas Valley. Power lines in the background cross an area proposed for a national monument.
JOHN LÖCHER/LAS VEGAS REVIEW-JOURNAL



With their fossilized bones poking from the chalky, beige soil, the animals that roamed what is now the Mojave Desert during the ice ages lie quietly where they died, unaware of civilization growing toward the edge of their graves.

Instead of lush plants that Columbian mammoths would munch while standing knee-deep in bubbling springs, the landscape is dotted with shrubs: creosote, buckwheat and bearpoppy plants.

Helicopters routinely thunder overhead on training missions from Nellis Air Force Base to

the range near Creech Air Force Base, 45 miles northwest of Las Vegas.

The helicopters skirt a safe distance over power transmission lines that transect the 23,000-acre area conservationists hope to protect.

To the south, the sprawl of the Las Vegas Valley ends in frontage roads and dead-end streets.

To the north, the view is a raw stretch of the

Mojave that flanks Desert National Wildlife Refuge, climbing to the chiseled ridges of the Sheep Mountains.

It is that view, as much as the undisturbed soil of the prehistoric cemetery, that Protectors of Tule Springs and the National Parks Conservation Association want to keep for tourists to see and for scientists to study. They expect the Nevada delegation to introduce a bill preserving the Upper Las Vegas Wash as a national monument when Congress reconvenes .

The U.S. Air Force also favors monument status, which would block construction of an NV Energy-proposed power line that would carry electricity from Amargosa Valley solar projects but also present a hazard to helicopters and low-flying warplanes.

"The way we see it, this is an opportunity to preserve two national treasures, one on the ground and the other in the air," said Deborah MacNeill, director of public partnerships for Nellis and Creech.

With dozens of renewable energy projects planned beneath the 12,000-square-mile airspace for the 2.9 million-acre Nevada Test and Training Range, the Air Force held an informational forum last month.

They wanted to let land managers and the renewable energy industry know that glare from mirrors and solar towers, and radar images from whirling wind turbines can interfere with aircraft navigation and targeting.

A new, higher-elevation transmission line across the proposed national monument site would further complicate matters, they say.

"It just seems like we're asking for a tragic accident," MacNeill said on a visit to the site last week.

Afterward, the North Las Vegas City Council authorized the city attorney to intervene in any action before the Public Utilities Commission of Nevada concerning NV Energy's transmission line.

In a statement Friday, NV Energy officials said they will continue to work with local governments and national monument proponents.

"The utility's current proposal allows for the co-existence of both the national monument area and NV Energy's transmission lines, while minimizing the impact to valuable resources in the Upper Las Vegas Wash," said Chelsie Campbell, senior representative for NV Energy's corporate communications.

She said the transmission lines are critical for solar development in the Amargosa Valley "and for future access to renewable resources along the western part of the state."

The lines would parallel ones already in place.

Lynn Davis, Nevada field office manager for the National Parks Conservation Association, said she hopes NV Energy's last-minute request will be dismissed by Sept. 13 so that national monument legislation can be introduced in the House and Senate.

Davis said if NV Energy is allowed to proceed, work would have to halt every time crews come across fossils from mammoths, North American jaguars, camels, bison, bears, sloths and other ancient animals in order to conduct costly and time-consuming paleontological digs.

Hundreds of fossils were documented when three-dozen poles were installed for the existing transmission line.

"You can expect that could be tied up for years," Davis said. "NV Energy predicts six to 10 years to build transmission lines, and during that time you'd be up here watching bulldozers."

A better alternative would be a transmission line along the Las Vegas Beltway, she said.

Tule Springs captured international acclaim in 1962, when scientists uncovered a variety of ancient animal fossils dating from 11,000 to 40,000 years ago.

Later studies indicated some fossils in the area might be 200,000 years old.

Researchers now hope the rich fossil beds will yield clues to climate change and arid conditions that might have helped cause the demise of the mammoth.

NEW MEXICO



Daily Report eNewsletter

Wednesday September 08, 2010

Low Flyers: The Air Force is considering establishing a low-altitude tactical navigation (LATN) area in northern New Mexico and southern Colorado. The LATN, which is pending an environmental impact assessment, would provide airspace for C-130s and CV-22s to conduct air combat maneuvers and low-altitude tactics training. If approved, the Air Force would fly about two sorties a day, or about 688 sorties a year. The aircraft could fly as low as 200 feet at 250 knots through the mountainous countryside. "The proposed LATN area in Colorado and New Mexico was selected due to the varied topography and weather, proximity to Cannon AFB[, N.M.,] and lack of large civilian populations," according to a Cannon [release](#). The training would enable Cannon's 27th Special Operations Wing to "provide air combat support and would sustain combat-ready crews for worldwide deployment," states the release. Officials also are considering an alternative proposal, which includes a smaller section of airspace.

USAF PROPOSES LOW ALTITUDE TACTICAL TRAINING AREA

Posted 9/2/2010 Updated 9/2/2010

Release Number: 010910

9/2/2010 - **CANNON AIR FORCE BASE, N.M.** -- The United States Air Force is seeking input regarding its intent to prepare an Environmental Assessment to evaluate the potential environmental consequences of establishing a Low Altitude Tactical Navigation area in northern New Mexico and southern Colorado.

The LATN would provide airspace to operate C-130 and CV-22 aircraft for training purposes. The LATN would allow the Air Force to train aircrew members and conduct military flight activities which may include, but are not limited to, air combat maneuvers and low altitude tactics.

The LATN will provide training airspace for Air Force Special Operation Forces at Cannon Air Force Base. Cannon AFB is located in eastern New Mexico approximately five miles west of the city of Clovis. The training would consist of approximately three sorties per 24-hour period, or approximately 688 flights annually. Aircraft altitudes

would remain between 200 and 3,000 feet above ground level, with the majority of the sorties taking place at 500 feet above ground level at airspeeds at or below 250 knots, and the majority of flights would take place after dusk. Approximately 95 percent of flights would occur Monday through Friday.

FAA and Air Force regulations require aircraft utilizing the LATN area to avoid airfields, towns, noise-sensitive areas, and wilderness areas by prescribed vertical and/or horizontal distances. For all other areas within the LATN, aircrews are prohibited from flying over the same point more than once per day. The sole objective of the LATN area is to support low-level flight training operations.

Mountainous terrain best supports development of special operations mobility skills. The proposed LATN area in Colorado and New Mexico was selected due to the varied topography and weather, proximity to Cannon AFB, and lack of large civilian populations. Realistic training in the LATN would enhance the 27 Special Operations Wing's ability to provide air combat support and would sustain combat-ready crews for worldwide deployment.

This notification is being sent pursuant to the National Environmental Policy Act of 1969, the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, and Air Force policy. The EA will assess the environmental impacts from the proposed action, one alternative which includes creating a smaller LATN area, and a no action alternative. The Air Force would like input concerning the proposed action and alternatives, as well as issues to address in the EA. For more information, visit the Cannon AFB website at www.cannon.af.mil, or contact 27th Special Operations Wing Public Affairs at 575-784-4131 or 27SOWpublicaffairs@cannon.af.mil by October 4, 2010.



Curry Road R discussed at Joint Land Use meeting

Wednesday, Sep 8 2010, 8:44 pm

Freedom New Mexico

Discussion centered around procedures needed to close Curry Road R at a Wednesday afternoon meeting of the Joint Land Use Study's policy committee.

More than a dozen people attended the meeting, which was held at the Curry County Courthouse, County Manager Lance Pyle said.

Pyle said County Attorney Stephen Doerr gave a presentation outlining the procedures needed to close the road, an action that would ultimately have to be taken by the county commission.

Rudy Bauer also gave a report on the Joint Land Use Study, Pyle said.

The JLUS was commissioned to evaluate the area and provide information to assist Cannon Air Force Base and surrounding communities in coexisting.

Cannon officials have said Curry Road R's proximity to the base perimeter creates security risks and have asked that it be closed.

The JLUS policy committee will next meet at 2 p.m. Sept. 27, Portales City Hall and at 6 p.m. JLUS public meeting in the Ingram Room at the Clovis Carver Library to obtain feedback from the community on the study.

VIRGINIA



Move the radar in Virginia Beach

© September 5, 2010

If we're worried about national security at Virginia Beach because tall buildings block one-third of the range of the Federal Aviation Administration's radar at Oceana Naval Air Station, the answer is not to do nothing and hope a hurricane clears the view.

The answer is to move the radar. Yes, it's expensive. Depending on the extent of the construction and relocation, anecdotal estimates to move the radar to Fort Story or the Eastern Shore range from a few million to \$25 million.

Yes, it would be complicated. The Air Route Surveillance Radar Model 4, which spins 360 degrees, is part of a network of 43 radars installed in the 1990s, primarily along the outer rim of the United States. The FAA uses it to direct air traffic; the Navy uses it to help manage offshore training, the Air Force monitors objects up to 250 nautical miles out between the New Jersey shore and the Outer Banks.

The radar detects unidentified aircraft, which means it is also a national security tool. But it has a huge blind spot.

A study the city commissioned determined that 34 percent of the radar's reach at the Oceanfront is blocked by tall buildings, some approved by the FAA in the past five years. As a result, developers planning one 200-foot-tall hotel on 34th Street at the Oceanfront have permission to build because a high rise nearby - the Mayflower Hotel, built in 1949 - already blocks the radar there. Building another wouldn't make a difference.

Nineteen blocks south, however, plans for a 165-foot hotel have been rejected because that hotel would further impede the radar's view.

Whether the city ought to be allowing high-rises is not the debate. In December 2008, the Virginia Beach City Council unanimously approved a plan to remake the resort into an urban space that includes high-rise hotels and office buildings.

In fact, the Beach already has about 35 buildings taller than 110 feet, or 10 stories, the maximum height the FAA allows in the resort area within reach of the radar.

In May, city officials talked about the radar with congressional and Department of Defense staffs. DOD officials said they would review the issues and respond within two months. The city has heard nothing.

If it's a national security issue, as the feds claim, then our security already is in peril because the radar doesn't detect anything in the shadows of tall buildings. The radar needs to be moved, immediately, to a place where its range is unencumbered.

Who should pay for the move is a matter that can be negotiated. And it should be - before our vulnerability to natural disaster or security breach jeopardizes the safety of the region or nation.

ALTERNATIVE ENERGY

Los Angeles Times | OPINION

Editorial

Wind farms and the radar problem

Wind farms interfere with commercial and military radar systems. That's stalling some projects, but it doesn't have to.

7:28 AM PDT, September 7, 2010

Increasing the amount of electricity we get from renewable sources such as the sun and wind is a national priority and a state mandate. Among the many obstacles to getting that done — opposition to new transmission lines, worries that solar plants will harm endangered species, conflicts over land use — one has until recently remained largely off the public radar screen. But the radar screen is precisely the problem: Wind farms interfere with commercial and military radar systems.

In 2009, wind projects that would have produced a combined 9,000 megawatts of power were shelved or stalled after the Department of Defense or the Federal Aviation Administration raised concerns about radar, according to the *New York Times*. That's nearly as much as the power generated by wind farms that were actually built last year. The Mojave Desert is a particular trouble spot because of the many military air facilities in the region, and several proposed projects there have been withdrawn after hitting turbulence from the military.

Modern wind farms plant rows of spinning turbines on towers up to 400 feet tall, sometimes causing aircraft passing overhead to appear to vanish from radar screens. It's a serious problem but it's not insurmountable, as wind developers in Solano County recently showed.

After officials at Travis Air Force Base raised objections to a wind-power project in the nearby Montezuma Hills, the project's developer and the Air Force reached a highly unusual agreement to share data. An independent consultant used the information to demonstrate that the turbines wouldn't interfere with the base's radar system, and the Air Force withdrew its opposition.

Unfortunately, that kind of cooperation is rare. More typical is the situation described by JASON, an independent advisory group that does scientific consulting for the U.S. government, in a 2008 report on wind farms and radar. It suggested that the military's preferred response to proposals for wind projects near bases was "to declare encroachment and block installations of offending turbines, rather than attempt to find technical means of ameliorating the turbine impact."

Such technical solutions exist, but they're expensive. The best one is simply to replace outdated military radar systems with more modern equipment that isn't fooled by wind turbines, but there are others, such as using high-tech coatings on turbine blades that don't interfere with radar. What's really needed is for the Obama administration to work out a coherent plan for dealing with such conflicts between its energy and national security priorities.



Tech fixes to wind turbine-radar conflict face hurdles

September 6, 2010 6:00 AM PDT - CNET News

Emerging technology can ease the problem of wind farms causing interference with air-traffic control systems. But deployment of that technology in the U.S. has been slowed by questions over authority and cost.

Since 2006, radar maker Raytheon and National Air Traffic Services, which provides air traffic control in the U.K., have been working on a project to upgrade air traffic radar so it can distinguish between aircraft and wind turbines' spinning blades. Concerns over the disturbances turbines can cause on air traffic control systems are already stunting the growth of wind power: radar and wind turbines conflicts derailed nearly as much as the total amount of installed wind power capacity in the U.S. last year.



A military plane takes off at Dyess Air Force base near Abilene, Texas.
(Credit: Abigail Vander Hamm/AWEA)

In the test, due for completion next spring, Raytheon and NATS are seeking to certify a combination of wind turbine mitigation techniques, including upgrading radar hardware and changing signal-processing algorithms.

"When you start putting a set of turbines across an area, what it looks like to the radar is a whole great field of moving objects," said Peter Drake, Raytheon's technical director for Digital Airport Surveillance Radar, the radar system used for airport terminals. "It's a very real problem."

Even though there are technical solutions, it's not clear how quickly they will make it into the field in the U.S. because air safety touches multiple government agencies with different priorities and budgets. "There's a lot of discussion taking place between everybody, but there isn't anybody who is tagged as lead," said Drake.

Mapping clutter

Wind farms can cause interference, or "clutter," on radar systems in more than one way. Spinning blades can appear on radar screens as an airplane, creating a false "target." Or, signals from the turbines can cause legitimate targets, such as an aircraft above a farm, to suddenly jump position, Drake explained.

A few turbines near an airport may not cause serious issues, but having wind farms with hundreds or thousands of turbines is far more challenging, he said. Exacerbating the issue is that wind-rich areas are often located near landing strips.

The problem is particularly troublesome at some military bases. So far, no serious safety incidents have occurred, but concerns with radar conflict have delayed or scrapped a number of wind farm projects in the U.S.

Raytheon began investing in wind turbine mitigation technology years ago in anticipation of the issue coming to a head as governments push for more renewable energy. The same techniques used in the NATS project could be applied to airport terminal radar systems in the U.S., said Brian Smith, the general manager for Raytheon Canada.

One technique, called concurrent beam processing, allows radar systems to discriminate between objects in the air and in the ground. Another creates a more accurate map of what the terrain looks like in all directions to help screen out stationary turbines from moving objects.

Implementing these technical fixes requires upgrading the electronics in radar systems so they can process more data and changes to the software that handles the data. These capabilities could be added as part of radar upgrades done for other reasons. "We're very confident that we have good solutions to solve the problems," said Smith.

Case-by-case mitigation

There are other mitigation strategies in addition to upgrading radar, but people should not think that one single solution is a "magic bullet" that completely solves the problem in every case, said Gary Seifert, a program manager for renewable energy technologies at the Idaho National Laboratories and an expert on wind-radar conflicts.

"Anybody who says they can solve all the problems is probably overstating," he said. "You can't just put in a magic box and have all the radar clutter disappear without impacting some performance issue."

Seifert recommends that each location be evaluated individually and that potential problems get identified early on in the process, so that wind developers' projects are not scuttled at the last moment.

Often, reducing the density of turbines can help address the issue, he said. In other cases, relatively straightforward software upgrades can greatly improve the ability of radar systems to filter out turbines.

Turbine manufacturers, including Vestas, are working on "stealth turbines" that have a material on the blades that cuts down on their reflectivity and cuts the amount of noise on radar systems.

Many other aerospace companies are working on the issue as well. Lockheed Martin, for example, has developed a long-range radar system that has more pinpoint control over radar performance near wind farms. Air traffic controllers could also use neighboring radars to improve the overall picture.

Even promising technologies, however, take many months or years to certify, whereas wind farm developers may have tight deadlines to keep costs under control. Also, there's the question of who will pay for the technical fixes: should it be taxpayer-funded agencies or wind farm developers?

The American Wind Energy Association said that there needs to be an increase in cooperation between wind developers and government agencies, such as the Federal Aviation Authority, the Department of Defense, and the Department of Homeland Security. Without it, the U.S. will not be able to meet a Department of Energy goal of getting 20 percent of electricity from wind, it said in a paper from April ([click for PDF](#)).

"I can't imagine a better example of everyone wanting to do the right thing and nobody doing it," aviation consultant and former FAA official Howard Swancy told The New York Times. "We need an infrastructure-size development plan."

CIVIL AIRPORTS



Friday, September 10, 2010

Memphians: Airport's noisy delivery OK

[Listen to the show](#)

In many cities around the U.S., there are people who live near major airports. But most flights usually take off and land during the day. In one Tennessee airport, though, the real action happens at night. And residents don't seem to mind. Jeremy Hobson reports.



TEXT OF STORY

BILL RADKE: Now to our series on how the recession and recovery are being felt in the heartland. Lots of Americans live in the flight path of an airport -- but then, most of those planes take off and land during the day.

Marketplace's Jeremy Hobson found an airport in Tennessee, where the real action happens at night and residents don't seem to mind.

JEREMY HOBSON: That might sound like an airport runway, but it's actually a leafy residential neighborhood in Memphis called Cooper-Young. And it's right in the flight path of Memphis International -- home of FedEx.

STEVE KRAYER: It's been going on so long, you just don't even think anything about it. It's like living next to a railroad track I guess.

I caught up with Steve Krayer taking the garbage out at his Cooper-Young home. That's just a few miles north of the airport.

KRAYER: I'd hate to think what Memphis would be like if FedEx wasn't here.

That's easy for Krayer to say. He's one of the 32,000 Memphians who work for the city's top employer/noisemaker -- FedEx. His neighbor, Kip Gordon, isn't.

HOBSON: Can you sleep through it?

KIP GORDON: Oh yeah. Yeah. And at this point, honestly, I've been here so long with it that if it stopped, I might have problems sleeping.

In fact, University of Memphis Sociologist Phyllis Betts told me it's as if FedEx CEO Fred Smith can do no wrong here.

PHYLLIS BETTS: Fred Smith is like the biggest thing next to Elvis.

Well, if that's the case, then I'm going to Graceland -- the main FedEx sorting facility at Memphis International. The action starts every night around 11 p.m.

FedEx VP John Dunavant has invited me up to the company's control tower.

JOHN DUNAVANT: Total aircraft inbound tonight will about 144. I think it's right about 1.6 million packages is what we'll sort tonight.

All those planes -- coming in from as far away as Hong Kong -- land within a couple of hours, making this the world's busiest cargo airport. The planes are unloaded and all the packages are swiftly sorted through a matrix of conveyor belts.

After that, they're loaded onto different planes. And around 2 a.m. it's takeoff time. If one of the flights can't go to it's original destination -- no problem. FedEx will fly the packages part way and truck them the rest. Dunavant says packages don't complain about re-routes like people do.

HOBSON: You've never had a package say "I'm never flying FedEx again?"

DUNAVANT: No not that we know of.

The airport authority says it gets about 12 complaints a year about the noise. Though a spokesman joked, most airports get at least 12 noise complaints a day.

In Memphis, I'm Jeremy Hobson for Marketplace.

MARINE MAMMALS



September 4, 2010

Our Noise Could be Killing Our Marine Life

M. Thornley

Noise on the oceans has increased considerably since the 1960s. A 2006 study at Scripps Institution of Oceanography at the University of California, San Diego, showed that our underwater world has become a much noisier place than it once was. This noise could be killing ocean life.

The study compared acoustic data recorded by the US Navy in the same area of San Nicolas Island west of San Diego. Results showed that noise levels were 10 to 12 decibels higher in 2003-2004 than in 1964-1966, an increase of three decibels per decade.

This noise may be caused by ships, wind farms, drilling, pile driving, construction and seismic testing.

Marine life uses sounds from the natural environment for many aspects of life. Although marine animals use vision they also gain auditory information that is far more extensive than the visual sense. In fact, notes Dr. Popper of the University of Maryland, sounds provide marine animals with a three dimensional view of the world.

An article titled `Human-Generated Sounds May Be Killing Fish` reported that invasive human noise could alter behavior patterns and mean the difference between life and death for marine animals. Marine animals can suffer from stress or become disoriented due to noise pollution in the same way as humans or land animals.

The construction and maintenance of coral reefs depends on sound. Dutch researchers in Curacao found that coral larvae use sound to establish a colony. Coral reefs support a vast range of aquatic life. Now threatened by global warming, storms and ocean acidification, the effect of noise pollution caused by humans on coral reefs may be yet another crucial deciding factor in the life and death equation of ocean life.

Dr. Steve Simpson of the University of Bristol conducted research into baby reef fish and discovered that baby reef fish use sounds made by fish, shrimp and sea urchins to find coral reefs. This fish needs coral reefs in order to thrive.

But in the crucial early hours of life, exposure to artificial noise can cause this fish to make the wrong choices. Notes Dr. Simpson, ``If fish accidentally learn to follow the wrong sounds, they could end up stuck next to a construction site or follow a ship back out to sea.``

In `Lonely Whales Shout to Overcome Noise` North American right whales are reported to battle environmental noise by raising their voices just like people in a noisy bar. Susan Parks, assistant professor of acoustics, Penn State, says that in a noisy ocean, it is ``critical for successful communication in an increasingly noisy ocean`` to be able to alter sound production.

Whales produce `upcalls` when they are alone or when they are joining a group of whales. Parks` study determined that an increase in background ocean noise due to commercial shipping has produced a corresponding increase in whale upcalls.

But there are considerable risks for the whales in increasing their upcalls. They expend more energy and alter their signals and the information contained in a signal, and they increase the risk of predators. Also, increased ocean noise lowers the communication range; feeding and mating could shrink, and stress levels could rise.

“It may be appropriate to move shipping lanes away from areas where there are concentrations of marine animals,” a researcher noted. “The impact of ocean noise pollution may be minimized by diminishing the noise source or by separating the noise from things that are sensitive to it.”

September 7, 2010

Mapping Whale Brains for Sound Effects

Kieran Mulvaney

Can powerful noises affect whales? There's circumstantial evidence to suggest that they might. Now a team of researchers is attempting to find out for sure.

The notion that at least some species of whales might be adversely affected by loud noises rests on two pillars. First, the cetacean world is one of sound, rather than vision; toothed whales use echolocation to find their way around and locate prey, and several species of baleen whales in particular emit deep vocalizations that can travel hundreds, possibly thousands, of miles across the ocean.

Secondly, there have been more than a few occasions on which whales have beached or been found dead in close proximity to a powerful noise source.

In particular, accusatory fingers have frequently been pointed at military use of powerful active sonar, which has been linked to numerous cases of strandings and death, particularly in various beaked whale species. While few if any of the individual cases can be linked unequivocally to a specific use of sonar, the accumulation of incidents is making a powerful case for the prosecution. Some have theorized that the sound panics the whales, forcing them to flee to the surface too quickly, causing them to suffer from rapid decompression.

But there is still surprisingly little clarity on the precise mechanisms by which sound could impact a cetacean, or even how an external source would propagate inside a cetacean's head - a hole in the knowledge base that a joint US-Swedish team is attempting to fill.

In a recent paper in the online journal PLoS One, scientists from San Diego State University, University of California, San Diego and the Kolmarden Zoo in Sweden developed an approach that "integrates advanced computing, X-ray CT scanners, and modern computational methods that give a 3D simulated look inside the head of a Cuvier's beaked whale" -- the species seemingly most affected by active sonar tests.

"Our numerical analysis software can be used to conduct basic research into the mechanism of sound production and hearing in these whales, simulate exposure at sound pressure levels that would be impossible on live animals, or assess various mitigation strategies," says Petr Krysl, of UC San Diego.

It's just the first step in an ongoing effort to understand what goes on -- at least on one level -- inside a beaked whale's head. It doesn't definitively answer whether Navy sonar is killing cetaceans -- yet. But by creating a greater understanding of the pathways by which sound travels inside a whale brain, it may very well help answer that question in the future.

"We believe that our research can enable us to understand, and eventually reduce, the potential negative effects of high-intensity sound on marine organisms," says Krysl.

September 8, 2010

Navy Sonar ‘Could Have Disorientated Dolphins’

Sally Williams

Dolphins forced into a West Wales harbour could have been disorientated by military sonar signals a wildlife group claimed last night.

The Sea Trust Organisation said four common dolphins, which are rarely seen in coastal waters, ended up in Fishguard harbour in Pembrokeshire on Sunday evening. It was the second time in the past two months that the species had been in danger of stranding.

In July, the Fishguard Ladies Rowing Team led a pod of 12 common dolphins out to the safety of deep water.

Cliff Benson of Sea Trust South and West Wales, said he is concerned that the mammals may be becoming confused due to Navy activity. He said several British warships have been exercising in Cardigan Bay in recent weeks.

“We also saw a submarine in the area last week,” he said.

“It seems strangely coincidental that groups of dolphins end up wandering around in circles seemingly disorientated in the harbour which is a completely alien environment for these oceanic wanderers. This time, I felt it better to let them find their own way out as it got darker and the tide receded.”

A spokesman at the Royal Navy headquarters at Portsmouth said: “We are checking on the level of naval activity in the Cardigan Bay area over the past few weeks. This will include exactly what kind of sonar transmissions may have been made, although other vessels – merchant ships, fishing vessels, etc – also operate sonar-type equipment.”

The Navy had a policy of carrying out sonar-risk assessments, he said. “This informs the officer in command of marine mammal distribution in the area and the impact the planned transmissions could have and how any adverse impact can be avoided. There is no evidence nor reason to believe that RN sonar has ever caused a stranding of marine mammals.”

OVERSEAS



Weapons range threatens wildlife

Dominic Feain | 1st September 2010

AS THE RAAF cranks up its FA-18 Super Hornet exercises near the Evans Head weapons range, concerns have been raised about the threat to endangered wildlife.

Veterinary surgeon Rod Blake said he was ‘gobsmacked’ to find there was an estimated 41 bird species and 12 mammals listed as endangered in the Broadwater National Park and, from what he could ascertain, little scientific study into existing fauna in the range or the effects of the new Super Hornet activity on wildlife.

“I’m dealing with injured wildlife daily and I’m deeply concerned about the environment we’re releasing them back into for a second chance,” he said.

While residents report significantly increased noise levels with the new jets, the RAAF plans to reintroduce ‘strafing’ – high-calibre machine gun passes – for the first time in 20 years and continue bombing runs with more powerful bombs.

“These things are going to be ripping up the ground where ground parrots are nesting,” Dr Blake said.

“My other concern is that no one really knows what’s in there and what we will be losing.

“I’m just not satisfied with responses to my letters from the NSW Department of Environment, Climate Change and Water (DECCW), the National Parks and Wildlife Service (NPWS), or Peter Garrett’s office.

“There appears to be a serious lack of scientific data – I wrote to the NSW Government requesting a key study on shore birds at the bombing range beach but first I had to tell



Getting it right: Air Commodore Mel Hupfeld, looking at public submissions into Evans Head weapons range.

them what I wanted it for, and if I did get access to it I was told I wasn't allowed to disclose the contents due to copyright.

"I asked them what they would do if I threw crackers at a bat colony and they wrote back saying this was in breach of the National Parks and Wildlife Act."

With significant wetlands situated within the bombing exclusion zone, some of Dr Blake's concerns relate to a 1980s US Fish and Wildlife study into the effects of aircraft noise and sonic booms on wildlife.

The study showed significant effects on the behaviour of waterfowl fly-overs, with some species completely abandoning habitat after exposure to low-altitude helicopters.

"I've seen helicopter gunships hovering over the wetlands," Dr Blake said, adding he was surprised at the general lack of bird life on the wetlands.

"There are also questions about the effects of jet noise on bird eggs,"

Arguments that the bombing range was there long before the national park do not sway Dr Blake.

"People's attitudes and expectations of wildlife conservation have changed dramatically in the past 30 years," he said.

"With all these threatened species in there, we need them to come out here and tell us what's going on."

Three months ago the RAAF undertook a review into future training requirements following outcries from fishers over the extended exclusion zone following the arrival of the FA-18 Super Hornets.

Two weeks ago, the RAAF opened a public submission period which will run till September 15.

While this did not specifically relate to birdlife or land-based wildlife, Air Commodore Mel Hupfeld promised such considerations would be taken seriously.

"We have already received a very constructive submission from Dr Blake and we will be using that as part of our assessment," he told The Northern Star.

"It will be a thorough process, we cannot, would not and will not take short cuts."

The RAAF has liaised with the DECCW and NPWS during its environmental impact assessment and will defer to their recommendations.

A department spokesman said it was still too early to say if scientific studies would be commissioned.

"If, and when, a proposal is lodged, the potential impacts on the parks' natural values, including threatened species, will be considered, along with fire management and control."



F-35 Lightning II Basing Announced

Benzinga Staff
09/09/10

OTTAWA, ONTARIO--(Marketwire - Sept. 9, 2010) - While visiting 3 Wing Bagotville, Quebec, the Honourable Peter MacKay, Minister of National Defence, announced today that sixty-five F-35 Lightning II fighter jets will be based at Canadian Forces Base Bagotville and Canadian Forces Base Cold Lake.

"The acquisition of sixty-five F-35 Lightning II aircraft is the realization of our Government's key commitment under the Canada First Defence Strategy to acquire a fifth generation fighter aircraft," said Minister MacKay. "I'm pleased to announce 3 Wing Bagotville in Quebec and 4 Wing Cold Lake in Alberta will equally serve as operating bases for Canada's new fighter jets. This provides continued and significant economic opportunities for these two communities."

Delivery of the Canadian Forces sixty-five F-35 Lightning II jets is expected to start in 2016. We expect that no less than twenty-four operational aircraft will be located at each of the wings, with the intent of maintaining a 50-50 balance between the fighter squadrons. The remaining F-35s will be attached to a training squadron at a location to be announced in the future.

"Canada's operational needs will be best served through continued use of the existing basing and infrastructure that are already supporting our fighter jet operations," stated Laurie Hawn, Parliamentary Secretary to the Minister of National Defence, during an infrastructure announcement at 4 Wing Cold Lake. "This announcement gives local authorities and businesses the certainty they need for long-term planning."

"3 Wing Bagotville and 4 Wing Cold Lake have long and proud histories of protecting Canadian and North American airspace at home and contributing to coalition operations abroad," said Lieutenant-General Andre Deschamps, Chief of the Air Staff. "With the arrival of the F-35 Lightning II, both fighter Wings will be well equipped to be at forefront of fighter operations to 2050 and beyond."

3 Wing Bagotville and 4 Wing Cold Lake are vital components of the Air Force and the Canadian Forces, and they will continue to support the strong readiness posture that has marked the military's operational success, at home and abroad. Canadian Forces personnel are key to maintaining the institutional agility that is essential to mission success, and the addition of the F-35 Lightning II fighter fleet at 3 Wing and 4 Wing will help them protect the safety and security of Canadians well into the 21st Century.

UNMANNED AERIAL SYSTEMS



Errant drone near DC almost met by fighter jets

By LOLITA C. BALDOR (AP) – September 9, 2010

WASHINGTON — The U.S. military almost launched fighter jets and discussed a possible shoot-down when an errant Navy drone briefly veered into restricted airspace near the nation's capital last month, a senior military official said Thursday.

The incident underscores safety concerns with unmanned aircraft as defense officials campaign to use them more often during natural disasters and for homeland security.

Navy Adm. James Winnefeld Jr., head of Northern Command, said Thursday that the August mishap could hamper the Pentagon's push to have the Federal Aviation Administration ease procedures for drone use by the military in domestic skies.

"It certainly doesn't help our case any time there's a UAV (unmanned aerial vehicle) that wanders around a little bit outside of its controlled airspace," said Winnefeld, who also is commander of the North American Aerospace Defense Command. "We realize the responsibility on our part to include the technical capability and proper procedures. We'd just like to be able to get at it quicker."

Currently drones are used for patrols and surveillance along the nation's southern border, and sometimes at the northern border. But the military wants to use them more during hurricanes and other disasters to evaluate damage or target rescue efforts.

The FAA has been working for some time on new regulations governing the use of drones, but has yet to complete them. And the August incident brought one of the FAA's key concerns to bear — the prospect that remote operators can lose communications with the aircraft.

Drones routinely operate in war zones, such as Iraq and Afghanistan, where there is much less business jet or small plane traffic. FAA officials say there is a greater danger of collisions with such smaller aircraft in the U.S., particularly when drones are flying at lower altitudes away from large cities and airports, in areas where planes aren't required to have transponders or collision warning systems.

In such cases, according to the FAA, it is more important for pilots to be able to see each other and take action.

Winnefeld said he was in the operations center watching when controllers lost the link to their Navy MQ-8B Fire Scout during a test at the naval air station at Patuxent River, Md., and it flew into the capital region's restricted airspace.

"Do you let it fly over the national capital region? Let it run out of gas and hopefully crash in a farmer's field? Or do you take action and shoot it down?" said Winnefeld. "You don't want to shoot it down over a populated area if you can avoid it. We were going through all of that calculus."

As the fighter jets were about to be launched, he said, the Navy was able to reprogram the helicopter-like craft and bring it back.

Winnefeld said he agrees with the need for airspace safety, but maintains there is great demand for the drones and the military should be able to get them into the air more quickly when needed.

"We can't move quickly enough for me to solve this problem," Winnefeld said. "We need to push forward into getting the technology and the permission and the comfort level up to where we can do this as a matter of routine. This is where the future is going."

Speaking to defense reporters, Winnefeld said discussions are continuing with the FAA to find ways to streamline the approval process. At the same time, he said the Defense Department also must address FAA's safety concerns by insuring that the drones have the software and systems necessary to fly safely.

He also said he is considering the need for a slower and lighter piloted aircraft that could be used during events such as outdoor sports games, political conventions or inaugural activities. The high-flying F-16 fighter jets are too fast for some missions.

While his review is only just beginning, Winnefeld said there may be a need for an aircraft that can fly much more slowly and at lower levels to monitor events. He said he'd like to have some answers within a year.