What Okinawa Wants You to Understand about the U.S. Military Bases

Over 5,800 species of life, including 262 endangered species, have been identified at Henoko’s Oura Bay as well as in the surrounding waters. The Japanese and U.S. governments are working to fill in an area equivalent to 160ha of these precious waters to build a new base where they plan to relocate Marine Corps Air Station Futenma.

Okinawa Prefectural Government
What Okinawa Wants You to Understand about the U.S. Military Bases

Introduction

Okinawa Prefecture understands the need for the Japan-U.S. security arrangement. However, the U.S. military bases in Okinawa, which were established during the Pacific War and expanded through subsequent forcible seizure of land by the U.S. military, comprise approximately 70% of the facilities exclusively used by the U.S. military throughout all of Japan, even today. The incidents, accidents, noise pollution, environmental issues and other problems that have arisen from these sprawling bases have had a significant impact on the lives of people residing in Okinawa, and just the presence of these bases is the biggest factor inhibiting Okinawa’s economic development.

This is the context within which the greatest issue facing Okinawa Prefecture today is the relocation of Marine Corps Air Station Futenma. Relocating Marine Corps Air Station Futenma to a site off the coast of Henoko in Okinawa and building a new base there will not only make permanent the excessive burden that these bases place on Okinawa and the gap vis-à-vis the extent to which such facilities are hosted in mainland Japan, but it will also lead to the destruction of a natural environment that is deemed internationally to be very precious.

The people of Okinawa Prefecture have continued to demonstrate their popular will in opposition to the relocation of Marine Corps Air Station Futenma in Okinawa through numerous elections where this plan has been the central issue. Because of these facts, Okinawa Prefecture opposes this plan. Both the Japanese and U.S. governments need to think seriously about the fact that imposes this plan on Okinawa will have without the consent of the people of Okinawa Prefecture – the very same people who have continuously shouldered an excessive burden of the U.S. military facilities that support the Japan-U.S. security arrangement.

In addition, with the security situation today in East Asia in flux as China increases its military prominence, North Korea develops missiles and other significant changes take place, prominent figures in Japan and the United States have argued that the plan should be reviewed from a strategic perspective as well.

Shouldn’t both the Japanese and U.S. governments make an effort to review the Marine Corps Air Station Futenma relocation plan so that a more stable Japan-U.S. security arrangement may be constructed?

We hope that this pamphlet will provide you with a chance to consider this issue.

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Section 1 U.S. Military Bases in Okinawa

1 History of U.S. Military Bases in Okinawa

1945: The U.S. military landing on the main island of Okinawa

Okinawa, which has beautiful nature and a unique culture, was reduced to ashes during the Pacific War as a relentless land battle, unparalleled in history, took place with shelling from naval ships and bombardment from the air so fierce that it has been called the "Typhoon of Steel.

Estimates put the amount of unexploded bombs that remain from the fighting at approximately 10,000 tons (roughly 22 million pounds). Even in 2017, approximately 1,985 tons (approximately 4.4 million pounds) are believed to still remain in the ground.

1945: Construction of Futenma Airfield

The U.S. military, which landed on Okinawa, forcibly isolated residents in concentration camps and seized their land to construct a series of new bases. Okinawan people had their land expropriated without any say at all. Those whose land was taken could not return home even if they wanted to and were left with no choice but to settle in the area around the base.

1955: New Base Construction

Even after the Pacific War ended, the U.S. military deemed it necessary to construct new bases due to the outbreak of the Korean War and other changes in world affairs, so they dispatched armed soldiers to forcibly remove residents in the "bayonets and bulldozers" campaign, which destroyed houses and flattened fields so that new bases could be constructed.

1960: U.S. soldiers marching through town in Okinawa under U.S. rule

After the war, Okinawa was placed under the administration of the United States for 27 years until the prefecture's reversion to Japan in 1972. During this time, the Constitution of Japan did not apply to Okinawa, and the people were unable to even send representatives to the Diet until 1970.

1972: Reversion of Okinawa to Japan

When Okinawa reverted to Japan in 1972, the Diet passed a resolution calling for "measures to be taken to promptly reduce and consolidate the U.S. military bases in Okinawa."

1996: SACO Agreement

The rape of an elementary school girl by three U.S. soldiers in 1995 aroused the anger of the Okinawan people, which prompted the Japanese and U.S. governments to agree on the total return of Marine Corps Air Station Futenma (Ambassador Mondale and then Prime Minister Hashimoto holding a joint press conference)

May 2015: Citizens' rally against relocation of Marine Corps Air Station Futenma to Henoko

Today, 72 years since the war ended, roughly 70.4% of the area exclusively used for U.S. military facilities in Japan is still concentrated in Okinawa Prefecture, which only comprises about 0.6% of Japan's total land area. The people of Okinawa Prefecture have expressed their popular will in opposition to the relocation of Marine Corps Air Station Futenma to Henoko.

Whereas the majority of U.S. military bases on the Japanese mainland use bases constructed by the former Japanese military prior to the war, the U.S. military facilities in Okinawa not only use former sites, but also forcibly expropriated public and private land. Okinawa has never once of its own volition offered land to the U.S. military.
Section 1 U.S. Military Bases in Okinawa

U.S. Military Bases in Okinawa Today

1. U.S. Military Bases

- Number of U.S. Military exclusive-use facilities: 31
- Area: 45,984 acres
- 8.2% of Okinawa prefectural land
- 14.6% of Okinawa main island
- Designated as water areas for training: 27 (13,575,475 acres)
- Designated as air space for training: 20 (23,577,807 acres)
- Number of military personnel: 25,843 (70.4% of all military personnel in Japan)

Legend

- U.S. Army
- U.S. Navy
- U.S. Air Force
- U.S. Marine Corps

In 1972 when Okinawa Prefecture reverted to Japan, Okinawa was the location for 58.7% of the total area exclusively used for U.S. military facilities in Japan. Greater progress in consolidating and reducing the U.S. military presence has been made in mainland Japan than in Okinawa Prefecture, with the result that today 70.4% of the total area exclusively used for U.S. military facilities in Japan is concentrated in Okinawa Prefecture, which itself accounts for only 0.6% of Japan's total land area.

This has forced the 1.44 million residents of Okinawa Prefecture to live next to U.S. military bases.
Section 1 U.S. Military Bases in Okinawa

(2) Incidents and Accidents Stemming from the U.S. Military Bases

| Number of accidents involving the U.S. military aircraft* |
|---|---|---|---|
| Crashes | Forced landings | Other | Total |
| 47 | 518 | 144 | 709 |

*From Okinawa's reversion to Japan (1972) until 2016

1959: U.S. Air Force F-100 crashed into Miyamori Elementary School
A U.S. Air Force fighter jet crashed into Miyamori Elementary School, which was located in Ishikawa City (currently Naha City) in the central part of Okinawa's main island, killing 17 people, including 11 children, and severely injuring 210 people.

2004: A U.S. military helicopter crashed into Okinawa International University
A CH-53D Sea Stallion, which was stationed at Marine Corps Air Station Futenma, hit the Main Administration Building at Okinawa International University in Ginowan City, crashed and burst into flames.

2016: MV-22 Osprey crashed near community
A MV-22 Osprey (stationed at Marine Corps Air Station Futenma), the deployment of which the people of Okinawa have strongly opposed, crashed near a community in Nago City.

October 2017: Helicopter crash landed on and burst into flames near private land
A CH-53E Super Stallion helicopter that was stationed at Marine Corps Air Station Futenma crash-landed and burst into flames in a field about 300 to 350 yards away from homes residential houses in Higashi Village.

December 2017: Helicopter window falls down onto an elementary school playground
One of the windows from the CH-53E Super Stallion helicopter fell onto the yard of Futenma Daini Elementary School, which is located right next to Marine Corps Air Station Futenma. Physical education class was in session in the schoolyard when the window fell. It is only a miracle that no one was hurt. If the window had fallen and hit the children standing not far away, they would have been seriously injured or even worse.
Section 1 U.S. Military Bases in Okinawa

<table>
<thead>
<tr>
<th>Felonious Offenses (Murder, rape, etc.)</th>
<th>Violent Offenses (Assault, injury, etc.)</th>
<th>Larceny Offenses</th>
<th>Intellectual Offenses</th>
<th>Moral Offenses (Gambling, public indecency)</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>576</td>
<td>1,067</td>
<td>2,939</td>
<td>237</td>
<td>71</td>
<td>1,029</td>
<td>5,919</td>
</tr>
</tbody>
</table>

*From Okinawa's reversion to Japan (1972) until 2016*

1995: Rally protesting against the rape of an elementary school girl by U.S. soldiers
An elementary school girl was abducted and raped by three U.S. soldiers. The case led to an explosion of anger of Okinawan citizens who have continually suffered from crimes committed by U.S. military personnel as well as harm from U.S. military bases for more than half a century.

2016: Citizens rallying against the murder of a Japanese woman by a U.S. military contractor
A U.S. military base civilian worker was arrested in a case where the body of a woman was found. He was charged with abandoning a corpse, rape resulting in death, and murder. The case has reignited the intense indignation of the people of Okinawa.

The cases cited represent only a fraction of the many accidents and incidents caused by the U.S. Military in Okinawa. Roughly 70.4% of the area exclusively used for U.S. military facilities in Japan is still concentrated in Okinawa Prefecture, which only comprises about 0.6% of Japan's total land area. The people of Okinawa have been the repeated victims of crimes and accidents perpetrated by U.S. military personnel for many years. This distrust has been ingrained in the Okinawan people on account of the repeated crimes and accidents committed by U.S. military personnel since the time when Okinawa was under U.S. administration after the war. The Okinawa Prefectural Government believes that this excessive burden of U.S. military bases needs to be reduced so that such crimes and accidents will not be repeated.

(3) Noise Pollution & Environmental Issues Stemming from the U.S. Military Bases

The noise produced by Kadena Air Base and Marine Corps Air Station Futenma exceeds Japan's environmental standards. At peak levels, the noise level is similar to that sustained right next to an aircraft engine. The average peak level of noise is like that produced inside a very loud factory. High levels of noise have also been observed between the hours of 22:00 and 6:00, the time when flight restrictions were mutually agreed upon between the Japanese and the U.S. governments.

<table>
<thead>
<tr>
<th>Air Base Vicinity</th>
<th>Monitoring Site</th>
<th>Average Daily Frequency of Noise Occurrences</th>
<th>Maximum Peak Level</th>
<th>Average Peak Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the vicinity of Kadena Air Base</td>
<td>Sunabe, Chatan Town</td>
<td>60.5 occurrences</td>
<td>114.1dB</td>
<td>91.3dB</td>
</tr>
<tr>
<td>In the vicinity of Marine Corps Air Station Futenma</td>
<td>Ue-ojana, Ginowan City</td>
<td>30.0 occurrences</td>
<td>116.7dB</td>
<td>88.8dB</td>
</tr>
</tbody>
</table>

Rivers, creeks and other water areas have often been contaminated by leaks of aircraft or diesel fuel from inside the bases. In returned areas as well, toxic substances have been detected that exceed Japanese Environmental Standards.

According to the Japan-U.S. Status of Forces Agreement, in principle, Japanese laws and regulations do not apply to the U.S. military. Okinawa Prefecture has called for the Status of Forces Agreement to be revised and Japanese laws to be applied to the U.S. military in order to alleviate aircraft noise, prevent serious environmental damage, and preserve order.
Section 1 U.S. Military Bases in Okinawa

(4) The Relationship between U.S. Military Bases and the Economy in Okinawa Prefecture

The U.S. military bases are not ordinary economic units like a company. As Okinawa's economy has expanded, the ratio of base-related income to the overall prefectural economy has significantly declined. Any economy dependent on a military base is limited in its ability to grow.

Significant economic development has been achieved in returned areas where U.S. Military bases were once located. Even base-related income to the overall prefectural economy has significantly declined. Any economy dependent on a military base is a completely wrong.

The U.S. military bases are not ordinary economic units like a company. As Okinawa's economy has expanded, the ratio of base-related income to the overall prefectural economy has significantly declined. Any economy dependent on a military base is limited in its ability to grow.

Base-related income percentage of gross prefectural income

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Prefectural Income (¥100 million)</th>
<th>Ratio of base-related income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>30.4</td>
<td>21.7%</td>
</tr>
<tr>
<td>1990</td>
<td>38.4</td>
<td>29.5%</td>
</tr>
<tr>
<td>2000</td>
<td>38.5</td>
<td>24.3%</td>
</tr>
<tr>
<td>2010</td>
<td>39.3</td>
<td>18.8%</td>
</tr>
<tr>
<td>2014</td>
<td>41.3</td>
<td>14.9%</td>
</tr>
</tbody>
</table>


Use of the land of the bases scheduled for return is anticipated to offer significant development.

<table>
<thead>
<tr>
<th>U.S. military bases</th>
<th>Direct economic effect (¥100 million/year)</th>
<th>Before return</th>
<th>After return</th>
<th>Multiplier effect</th>
<th>Number of jobs created</th>
<th>Before return</th>
<th>After return</th>
<th>Multiplier effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Kuwae</td>
<td>40</td>
<td>334</td>
<td>8 times greater</td>
<td>3,409</td>
<td>10 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp Zukan</td>
<td>109</td>
<td>1,061</td>
<td>10 times greater</td>
<td>954</td>
<td>8 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Corps Air Station Futemna</td>
<td>120</td>
<td>3,866</td>
<td>32 times greater</td>
<td>1,074</td>
<td>32 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makiminato Service Area</td>
<td>202</td>
<td>2,264</td>
<td>13 times greater</td>
<td>1,793</td>
<td>14 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naha Military Port</td>
<td>30</td>
<td>1,076</td>
<td>36 times greater</td>
<td>228</td>
<td>47 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>501</td>
<td>8,900</td>
<td>18 times greater</td>
<td>4,400</td>
<td>18 times greater</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey of Economic Ripple Effect from Use of Land Occupied by U.S. Military Bases (Published by Okinawa Prefecture January 2015)

For example, Okinawa Prefecture and Ginowan City are envisaging the formulation of a plan to use the land where Marine Corps Air Station Futemna currently stands. (See map below)

As U.S. military bases are returned, these locations are expected to be put to better use to achieve significant economic development due to their location in the middle of Asia, an enormous market in which 2 billion people live and work.

Map of Arrangement / Layout Policy

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Section 1 U.S. Military Bases in Okinawa

(5) Marine Corps Air Station Futenma

The area around the airfield is a densely populated residential area. Ginowan City where the base is located is home to 98,000 people. There are 15 elementary and junior high schools, four high schools and one university. A large population is concentrated in this urban area.

Marine Corps Air Station Futenma is located in the center and has been called the world's most dangerous base. On August 13, 2004, a large helicopter crashed on the campus of Okinawa International University. This accident among other events have caused tremendous anxieties among the people living in the surrounding community.

Moreover, right training is still conducted after 10:00pm, the time when flights are restricted to reduce aircraft noise. The people living in the vicinity of the airfield have no other choice but to go about their daily lives together with the noise pollution, aircraft accidents as well as other dangers emanating from the airfield.

(6) Reasons Why the Issue of the Relocation of Marine Corps Air Station Futenma Is Not Resolved

In April 1996, then Prime Minister Hashimoto and Ambassador Mondale held a joint press conference where they announced the complete return of Marine Corps Air Station Futenma. However, the Special Action Committee on Okinawa (SACO) Final Report released in December 1996 set relocation of the base within the prefecture as a condition for its return, which was decided without the consent of the people of Okinawa. This is the reason why the base relocation issue has still not been resolved until today.

Section 2 Q&A about the Issue of the Relocation of Marine Corps Air Station Futenma

Q: Why is the relocation of Marine Corps Air Station Futenma to Henoko so controversial?

A: The issue of the relocation of Marine Corps Air Station Futenma to Henoko is controversial due to several reasons. Firstly, the area around the base is densely populated with a large number of residential and educational institutions. Secondly, the base operates helicopters that conduct training exercises near civilian areas, causing noise pollution and other disturbances. Lastly, the Japanese and U.S. governments have repeatedly promised to relocate the base but have yet to provide adequate compensation and assurance of improved living conditions for those affected by the base's presence.
Q1 What Does the Okinawa Prefectural Government Think of the Relocation of Marine Corps Air Station Futenma and the Japan-U.S. Security Arrangement?

The Okinawa Prefectural Government believes that the Japan-U.S. security arrangement has contributed to maintaining peace and stability in Japan and East Asia, and we understand the significance of this arrangement. However, today with the security situation in East Asia in flux as China increases its military prominence, North Korea develops missiles and other significant changes take place, prominent figures in Japan and the United States have argued that the relocation plan should be reassessed to also adopt a strategic perspective.

Even though 72 years have passed since the end of the war, approximately 70.4% of the facilities exclusively used by the U.S. military continue to be located in Okinawa Prefecture, which accounts for only 0.6% of Japan’s total land area. Constructing a new base at Henoko, which will likely be used for the next 100 or 200 years, makes permanent this excessive burden as well as the gap in responsibility between Okinawa Prefecture and mainland Japan. For the people of Okinawa Prefecture, this is totally unacceptable.

The public will of Okinawan people opposing relocation to Henoko has been demonstrated in a series of elections, including the Nago mayoral, Okinawa gubernatorial, and Japan House of Representatives elections in 2014 as well as the prefectoral assembly and Japan House of Councillors elections in 2016. The central issue in all of these elections was the relocation of Marine Corps Air Station Futenma to Henoko. In addition, many precious species have been identified in the waters of Henoko’s Oura Bay, the proposed relocation site. If the waters are reclaimed for this new base, this precious natural environment will be lost forever.

Okinawa has never once provided a site for a base of its own volition. While the Okinawan people were held in concentration camps when the U.S. military occupied Okinawa after the war, the U.S. military tore down houses and destroyed fields to build bases. Even after Japan regained its sovereignty in 1952, Okinawa remained under U.S. occupation. Armed soldiers forcibly confiscated peoples’ land and other areas in a “bayonets and bulldozers” operation so that bases could continue to be constructed one after another without any regard for the thoughts of the Okinawan people.

It is truly outrageous that the Japanese and U.S. governments intend to further burden the people of Okinawa, whose lands were taken from them by the U.S. military during and after the war and have truly suffered ever since, with another base at Henoko to replace Marine Corps Air Station Futenma, which has become superseded and is the world’s most dangerous base, because these governments claim Henoko is the only solution.

It is for these reasons that the Okinawa Prefectural Government opposes the relocation of Marine Corps Air Station Futenma to Henoko.

(Question 1 is answered on page 16.)

Q2 Isn’t the Issue of the Relocation of Marine Corps Air Station Futenma a Domestic Issue in Japan?

The U.S. military bases in Okinawa were established through the forcible seizure of Okinawan people’s land. For many years, these bases have been the origin of crimes, accidents, noise pollution, and environmental issues among other problems.

In accordance with the agreement on the return of Marine Corps Air Station Futenma, the U.S. military will use an alternate facility which is to be constructed by the Government of Japan. Moreover, the U.S. government has confirmed together with the Japanese government that relocation to Henoko is the only solution. In that sense, the United States government is also a party to this problem.

Today with the security situation in East Asia in flux as China increases its military prominence, North Korea develops missiles and other significant changes take place, prominent figures in Japan and the United States have argued that the plan should be reassessed from a strategic perspective as well.

(Question 2 is answered on page 16.)
What Is Henoko's Oura Bay, the Relocation Site for Marine Corps Air Station Futenma, Like?

Henokozaki Cape and the adjacent Oura Bay in the northern part of the main island of Okinawa are home to a very fertile subtropical sea area and forest with internationally precious and rich biodiversity. These areas are treasures that we are very proud of. The sea area in and around Henokozaki Cape, which is set to be filled in for construction of the new base, is a rare and valuable natural environment. The deep bay and surrounding land, which faults and erosion continue to affect on both, interlaces very diverse ecosystems.

This very narrow strip of sea (approx. 8,900 acres) is inhabited by over 5,800 species, including 262 endangered ones and 466 planktonic species, establishing a rich ecosystem that is highly biodiverse. Many biological species have been identified in this area. In the 10 years since 2006, a total of 26 new species have successively been discovered, including those of shrimp, crab and goby fish. The area also holds high potential for the discovery of many more new species in the future.

This tract of Oura Bay has high level of biodiversity in Japan, which is recognized as one of the world’s biodiversity hotspots.

The natural environment of Oura Bay is an irreplaceable treasure that should be shared with entire human race, and one that we must preserve and pass on to future generations.
**Q5** What is the Evaluation of Scholarly and Conservation Groups about the Relocation to Henoko?

Several national and international academic societies and nature conservation groups have made recommendations and called for additional surveys and environmental conservation measures to protect the Henoko area, which the Japanese government is promoting as the relocation site.

The joint communiqué (*1) issued by 19 academic societies including the Ecological Society of Japan mentions that there are records of 5,334 species in the Henoko waters and 11 new species registered. The communiqué states that this sea area is "one of the few areas in Japan that has a very high level of biodiversity." Regarding to the Japanese government’s response, the communique is critical: "Not only have the Japanese government failed to sufficiently address these concerns.

The United States as well, in August 2017, the Ninth U.S. Circuit Court of Appeals in San Francisco overturned a decision by the district court dismissing the "Okinawa Dugong Lawsuit," which was filed by environmental groups from the United States and Japan in 2003, and remanded the case back to the district court for further proceedings. (August 21, 2017 Dugong law suit petition) http://cdn.call.uscourts.gov/databases/opinions/20170821/15995.pdf

Despite repeated calls from academic societies, nature conservation groups and others for additional investigations and environmental conservation measures, the Japanese government has disregarded these and moved the construction forward. If the project is carried out as currently planned, the precious natural environment of Henoko's Oura Bay will be lost forever.

(*1) Joint Communiqué of 19 Academic Societies Calling for Conservation of the Environment of Okinawa Prefecture's Oura Bay Which Possesses a Remarkably High Biodiversity (November 11, 2014)

Reference: Recommendations issued by IUCN related to the natural environment of Henoko and Oura Bay:

Fill Material Used for Land Reclamation in Construction of New Base at Henoko

The equivalent of 2 million 10-ton dump truck loads (approx. 21,000,000 m³) of earth and sand will be used for land reclamation. The majority of this is set to be delivered from mainland Japan.

Although concerns expressed by environment conservation groups have pointed out that this will lead to the invasion and spread of alien species, the Japanese government has failed to sufficiently address these concerns.

At the IUCN’s September 2016 World Conservation Congress, a recommendation was issued calling for measures to address the invasion of alien species from such reclamation fill material, but the Japanese government abstained from adopting this recommendation.

There is a risk that the Argentine ant (above) and red-back spider (below) may invade by becoming mixed in with the earth, sand and other fill material.

**Q6** What is the View of Experts about the Risks of Earthquakes Striking the ground subsiding at Henoko, the location where the new base is planned?

Digging down below the ground surface, one eventually reaches a layer comprised of very hard rock in which there are many cracks or geologic faults. As significant force is applied to this layer, these cracks will rupture. That impact is then transmitted throughout the layer, resulting in an earthquake. Of these geologic faults, those where seismic activity has repeatedly occurred for hundreds of thousands of years and where such activity is anticipated in the future are referred to as "active faults."

Two faults intersect below the waters of Oura Bay near the planned site for construction of the new base at Henoko. Submarine terrain has been observed where there is a sharp drop-off of over 50 meters. It is here that geologists point out the likelihood that the faults are active.

Trench earthquakes recur every 100 to 200 years, a much shorter interval than those originating in active faults. Based on actual data, geologists and environmentalists have pointed out the danger of trench earthquakes and subsequent tsunami to the area where construction of the new base is planned.

Between May 2014 and April 2017, the Japanese government used bedrock survey ships to conduct boring surveys predominantly around the faults where this sharp drop off has been observed. Okinawa Prefecture has made several requests to the Japanese government for the survey data results. Although the Japanese government has not released the data nor disclosed the purpose of these surveys, it has moved forward with the land reclamation project.

In this same sea area, geologic maps indicate coral reefs and the poor subsoil beneath which there is an accumulation of Ryukyu limestone. Civil engineers have predicted that the project will be difficult to complete and maintain due to the extensive ground reinforcement required for construction.

Regardless, the Japanese government should promptly release the geological survey data collected so that the safety of geological strata and ground at the planned construction site may be verified.

**Earthquakes recorded in Okinawa Prefecture having a magnitude of 6 or greater (1923-2017)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Magnitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 February 27, 2010</td>
<td>M7.2</td>
</tr>
<tr>
<td>2 July 6, 2008</td>
<td>M6.1</td>
</tr>
<tr>
<td>3 July 10, 2004</td>
<td>M6.1</td>
</tr>
<tr>
<td>4 August 16, 2001</td>
<td>M6.4</td>
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*Statistical data collected by the Japan Meteorological Agency show that there have been 13 earthquakes registering a magnitude of 6 or greater in the seas around the Okinawa main island over the 94 years from 1923 to 2017. Even in Japan which is plagued by earthquakes, Okinawa Prefecture is also experiencing many earthquakes.*
Q7 Aren't the U.S. military bases concentrated in Okinawa for military reasons?

When we look at the change in total area set aside exclusively for U.S. military facilities in Okinawa and mainland Japan, we see that although there was a greater percentage sited in Japan proper during the 1950s, a pattern developed around the time of the prefecture's reversion to Japan in 1972 whereby more than 70% of the U.S. military bases came to be concentrated in Okinawa, just as we see today.

Prepared by OPG based on the USCAR Ryukyu Islands Facts Book (up to 1971) and material released by Japan's Ministry of Defense (from 1972)

The reasons behind this shift are the transfer of military units to Okinawa and the consolidation and reduction of bases in mainland Japan to quell anti-American and anti-base sentiment while, at the same time, bases were expanded and their function strengthened in Okinawa, which was governed by the U.S. military.

A former Japanese defense minister and even a former U.S. secretary of defense have stated definitively that U.S. military bases do not need to be in Okinawa for military reasons.

In December 2012, then Defense Minister Satoshi Morimoto stated, "The U.S. Marine Corps doesn't have to be in Okinawa for military reasons, but Okinawa is the best place for them to be for political considerations."

In addition, former U.S. Defense Secretary William Perry, who agreed to the SACO Final Report, said in an interview with the Japanese media that there is nothing special about the geographical position of Okinawa militarily, and locating bases in Okinawa presents political and economic issues.

Recent improvements in missile technology have conversely placed the U.S. military bases at risk militarily due to their concentration in Okinawa, and this vulnerability has been pointed out in the United States as well.

Moreover, the U.S. Government Accounting Office identified numerous deficiencies in the current plan to relocate Marine Corps Air Station Futenma to Henoko, including the shortening of the runway from the current 2,800 m to 1,800 m, a length incapable of accommodating emergency landings by fixed wing aircraft. The GAO also pointed out that the maintenance of security capabilities in this area is not possible.

It is evident that there is no military rationale for concentrating the U.S. military bases in Okinawa, and the current relocation plan of Marine Corps Air Station Futenma to Henoko should also be revised from a military perspective.

Q8 What Will be the Impact if the Japanese and U.S. Governments Forcibly Relocate Henoko?

As has previously been stated, a majority of the people of Okinawa Prefecture oppose construction of a new base at Henoko. Japan is a democratic state and the Okinawan people have demonstrated their public will. The position of the U.S. with respect to the Japanese government's disregard for democracy, dismissal of public opinion, and forcing through construction of a new base, which the U.S. regards as "Japan's domestic issues", is utterly incomprehensible.

The repeated crimes and accidents stemming from the U.S. military bases and the Japanese government's push to construct a new base at Henoko have and will incite greater sentiment among the people of Okinawa in opposition to this plan, which could transition into protests against the entire U.S. military. Such a situation would likely make stable operation of U.S. military bases in Okinawa, including Kadena Air Base, even more difficult.

We hope that the governments of both Japan and the U.S. will stop pressing ahead with this new base project in such a hasty manner, that they will look beyond the archaic stereotypes, take into account the transformation of the international situation, and rethink moving Marine Corps Air Station Futenma outside of Okinawa Prefecture or even outside of the country.

There are serious concerns that strong-armed attempts to press ahead with construction of the new base at Henoko will have an adverse effect not only on U.S. military bases in Okinawa, including Kadena Air Base, but also on the Japan-U.S. security arrangement.

Main U.S. Facilities on Okinawa

- Camp Schwab
- Camp Hansen
- Camp Courtney
- Marine Corps Air Station Futenma
- Camp Zukeran (Camp Foster)
Okinawa Collection

The George Washington University Libraries in Washington, D.C. is home to the Okinawa Collection (OC). Located in the Libraries' Global Resources Center (GRC), the OC’s specialized research and reference materials focus on Okinawa’s contemporary history, politics, economy, public policy, culture and related topics, and are available to anyone interested in studying or learning more about contemporary Okinawa.

To gain access to the Okinawa Collection, contact the Global Resources Center at 202-994-7105 or email grc@gwu.edu to arrange for entrance in accordance with the Gelman Library’s entrance policies.

For more information, please refer to <https://library.gwu.edu/grc>.

Okinawa Prefecture Washington D.C. Office

The Okinawa Prefectural Government Washington D.C. Office exchanges opinions with members of Congress, their staffs, U.S. government officials, think-tank professionals and other influential figures, and strives to collect and disseminate information about Okinawa so as to contribute to the resolution of the U.S. military base issues in Okinawa. Please feel free to contact the office whenever you need any information about Okinawa.

Okinawa Prefectural Government

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- Military Base Affairs Division, Executive Office of the Governor  Tel. +81-98-866-2460 (direct)
- Henoko Base Construction Countermeasures Division  Tel. +81-98-866-7495

Published in March 2018
MARINE CORPS
ASIA PACIFIC
REALIGNMENT

DOD Should Resolve Capability Deficiencies and Infrastructure Risks and Revise Cost Estimates
MARINE CORPS ASIA PACIFIC REALIGNMENT

DOD Should Resolve Capability Deficiencies and Infrastructure Risks and Revise Cost Estimates

Why GAO Did This Study

For two decades, DOD has planned to realign its presence in the Asia-Pacific region. The Marine Corps has plans to consolidate bases in Okinawa, relocating 4,100 Marines to Guam, 2,700 to Hawaii, 800 to the continental United States, and a rotational presence of 1,300 to Australia.

The Joint Explanatory Statement accompanying the Consolidated Appropriations Act, 2016, included a provision that GAO study the realignment initiatives in the Asia-Pacific region. This report assesses the extent to which DOD has (1) coordinated its efforts and resolved selected identified capability deficiencies related to the relocation of Marines; (2) developed infrastructure plans and schedules and completed risk planning for its infrastructure that will support the relocation; and (3) developed reliable cost estimates for infrastructure for the relocation of Marines to Guam and Hawaii and the rotational presence in Australia. GAO reviewed relevant policies and plans; analyzed cost documents; interviewed DOD officials; and visited U.S. military installations in the Asia-Pacific region.

What GAO Found

The Department of Defense (DOD) has coordinated the relocation of Marines from Okinawa to other locations in the Asia-Pacific region through developing a synchronization plan and organizing working groups. However, DOD has not resolved selected identified capability deficiencies related to the relocation of Marine units; training needs in the region; the reduction in runway length at the Futenma Replacement Facility in Okinawa; and challenges for operating in Australia. DOD guidance indicates that mission requirements—which would include the capabilities needed to fulfill the mission—largely determine land and facility support requirements. If DOD does not resolve the selected identified capability deficiencies in its infrastructure plans, DOD may be unable to maintain its capabilities or face much higher costs to do so.

DOD has taken steps to develop infrastructure plans and schedules for its relocation efforts, but it did not develop a reliable schedule for the Marine relocation to Guam and has not completed its risk planning for infrastructure in Guam. DOD developed plans that will support construction efforts in Guam and Japan, and developed some initial infrastructure plans for Hawaii and Australia. However, GAO found the Marine Corps' integrated master schedule for Guam did not fully meet the comprehensive, well-constructed, and credible characteristics for a reliable schedule. For example, the schedule does not include all life-cycle costs or a Work Breakdown Structure. Additionally, the Marine Corps has not completed its risk-management plan for infrastructure construction in Guam. Specifically, the Marine Corps has not identified its strategy to address construction risks including labor shortages and endangered-species protection. If DOD does not have a reliable schedule or has not completed risk planning for Guam, it may not have complete information to identify and address risks that may result in cost overruns and schedule delays.

DOD has made progress in developing cost estimates for Guam, but its estimates partially met GAO best practices for reliable cost estimates for the relocations to Guam and Hawaii and the establishment of a rotational presence in Australia. For cost estimates related to Guam military construction activities, DOD included ground rules and assumptions, but did not include some elements of a reliable cost estimate, such as a risk analysis. Additionally, DOD developed cost estimates for nonmilitary construction activities that provide a high-level planning overview of the requirements, but they did not incorporate several other best practices, including a unifying Work Breakdown Structure that defines in detail the work necessary to accomplish a program's objectives. For Hawaii and Australia, the cost estimates are not considered reliable because they did not include all life-cycle costs or a Work Breakdown Structure. If DOD does not revise the cost estimates for these locations, decision makers in DOD and Congress will not have reliable cost information to inform funding decisions and to help them determine the viability of relocation of Marines to Hawaii and the establishment of a rotational presence in Australia.

What GAO Recommends

GAO recommends that DOD resolve capability deficiencies in the four selected identified areas, update its schedule for Guam infrastructure, complete a risk-management plan for Guam infrastructure, and revise its three cost estimates. DOD concurred with two recommendations, partially concurred with six, and did not concur with one. GAO continues to believe its recommendations are valid, as discussed in this report.

View GAO-17-415. For more information, contact Brian Lepore at (202) 512-4523 or leporeb@gao.gov.

United States Government Accountability Office
FRF-related Recent Developments in Okinawa (June 2019)

1. Expert committee launched to study the U.S. military presence in Okinawa

On May 30th, 2019, Okinawa Governor Denny Tamaki announced the creation of “Bankoku Shinryo Conference,” a group of Japanese and international experts who will play an advisory role to the Governor in shaping the government’s policies on U.S. base issues. The expert committee will analyze the following:

- Recent changes in the security environment surrounding Japan and East Asia
- The future of the U.S. military presence in Japan
- The strategic roles of the U.S. Marine Corps and other U.S. military facilities in Okinawa

The committee will meet multiple times in 2019. Governor Tamaki has shared his plans to utilize the insights obtained from the discussions in pursuing more options to reduce the burden of the U.S. military bases in Okinawa.

2. Governor’s request to accelerate the process to halt operations at MCAS Futenma

In May 2019, Okinawa Governor Tamaki submitted a formal request to U.S. Ambassador to Japan William F. Hagerty to expedite the process to halt operations at MCAS Futenma in Ginowan City. Japan and the U.S. agreed to return MCAS Futenma in 2006 to reduce the U.S. military presence in Okinawa, and the Japanese government had promised Okinawa to halt the operations at MCAS Futenma by February 2019. Even though the deadline has already passed, the military base is still active today.

MCAS Futenma is located in the middle of Ginowan City, a densely populated residential area. Accidents and incidents have occurred repeatedly in the vicinity of the base, for example, the CH-53D crash to local university in 2004 and the helicopter part falling to an elementary school in 2017. These incidents have continued to spur safety concerns among local residents. If a catastrophic accident were to occur, it would have a serious impact on the future of the Japan-U.S. alliance. The Prefecture requests that the U.S. government engage in a sincere and open discussion with the Japanese government and promptly respond to the Prefecture’s request to halt activities at the MCAS Futenma.
3. Unclear future of the Futenma Replacement Facility (FRF)

Even though Japan and the U.S. have agreed to relocate MCAS Futenma to the Futenma Replacement Facility (FRF) that is being constructed in the northern part of Okinawa, the facility’s future is not yet clear due to the following issues:

- **Political & Environmental Issues**...Approximately 72% of local Okinawan voters expressed their opposition to the current relocation plan and land reclamation work in a recent referendum. Okinawans are specifically worried about increasing safety risks, noise pollution, and environmental damage. According to the national poll conducted by Kyodo News Service, 69% of the voters expressed their opinion that the Japanese government should respect the consequence of the referendum in Okinawa.

- **Technical Issues**...The FRF construction site has an unstable seabed and requires reinforcement work in addition to the original construction design. The Japanese government has been considering different options, but the reinforcement work is expected to be unprecedented in both scale and cost. These changes in the construction design will cause work delays and cost increases, and it is estimated to take more than 13 years to complete the FRF project. Members of the Japanese Diet have raised their concerns about these issues.

- **Operational Issues**...As the U.S. Government Accountability Office (GAO) has pointed out in its report published in April 2017, the runways that the Japanese government is trying to construct as a part of the FRF will not meet the mission requirements of the U.S. Marines. GAO insists that the runways will be too short for the Marines’ practical use and suggests that the DOD consider alternatives.

The reclaimed soft ground at the Henoko site has also caused operational concerns. Several experts have pointed out that the soft ground makes the site a non-ideal location for the FRF because it would make the planned runways more architecturally vulnerable, potentially impairing the Marine Corps’ readiness to respond to foreign aggression.

Experts have also pointed out that there is an active fault in the seabed near the construction site, placing all of the reclaimed areas in the air base at risk of serious damage from earthquakes.
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# PFOS+PFOA Survey

**by Okinawa Prefectural Enterprise Bureau 2019**

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This material is distributed by Okinawa Prefecture DC Office, Inc. on behalf of the Okinawa Prefecture. Additional information is available at the Department of Justice, Washington, D.C.
Northern Training Area

Ie Jima Auxiliary Airfield

Ginowan City

Kadena Town

A vast U.S. military base is located in the center of the city

82% of the town area comprises U.S. military bases

Kadena Ammunition Storage Area

Yaedake Communication Site

Camp Schwab

Camp Hansen

Henoko Ordnance Ammunition Depot

Tengan Pier

Km Blue Beach Training Area

Torn Communication Station

Camp Kuwae

Camp Zukeran

Futenma Air Station

Makiminato Service Area

Naha Military Port

Camp Courtney

Camp McCureous

Camp Shields

Ukibaru Jima Training Area

White Beach Area

Tsuken Jima Training Area

Japan National Route 58

U.S. Military Installations

Army

Navy

Marine Corps

Air Force

Training Water Areas

Total Land Area of Okinawa: 879-04 sq. mi / 2,276-72 km²

Okinawa Island: 446-53 sq. mi / 1,208-33 km²

Land Area of US Military Facilities*: 88-05 sq. mi / 228-07 km²

Number of Facilities**: 32

(As of March 2013)

* & ** indicate those exclusively used by the US Forces.
Futenma Replacement Facility: Recent Developments in Okinawa 
(March 2020)

Details of the new issues revealed by the Government of Japan

Background
The U.S. and Japanese governments have agreed to replace the U.S. Marine Corps Air Station Futenma (MCAS Futenma) that is currently located on Okinawa, which will now move from a densely populated area to the northern part of the prefecture called Henoko. The Futenma Replacement Facility (FRF) is now currently under construction at the Henoko site, but faces multiple technical issues, since the construction project requires large-scale land reclamation work to build an offshore V-shaped runway. Specifically, these issues include:

1. The soft seabed at the FRF site and the potential impacts to the Marines’ operations
2. The construction time has doubled, and the construction cost has nearly tripled
3. The lack of construction vessels and the lack of reliable surveys at the actual construction site

This memo describes the differing views about these issues from the Okinawa Prefectural Government and the Japanese Government and addresses the potential risks and delays related to the construction work. The Prefectural Government’s views are supported by Japanese Diet members, and technical advisors for the Japanese Ministry of Defense, which has primary responsibility for the project implementation also refer to it. In fact, nineteen Japanese Diet members have asked questions about these issues to the Japanese government.

These potential risks and delays would have an impact on the U.S. Marine Corps’ future operations at the FRF, as well as the facility’s maintenance work, which would be funded and managed by the U.S. Department of Defense. The Okinawa Prefectural Government hopes that the U.S. government will conduct its own review regarding the progress and feasibility of the construction project.

1 The soft seabed at the FRF site and the potential impacts to the Marines’ operations
In early 2019, the Japanese government acknowledged the existence of the soft seabed at the land reclamation site in Henoko. The soft seabed is expected to increase the risk of subsidence and would require numerous maintenance projects over the course of 50 years (the FRF’s estimated lifecycle) if the relevant preventative measures are not taken, according to the technical advisors for the Japanese Defense Ministry. Those experts also implied the potential impact of the uneven subsidence caused by the soft seabed on the future operations of the runways that will be built on top of the reclaimed land and used by the U.S. Marine Corps.1

2 The construction time has doubled, and the construction cost has nearly tripled
In late December, the Japanese Defense Ministry announced that it will need about 10 years to complete the land reinforcement work for the soft seabed and the reclamation work to construct the FRF in Henoko.4 Since the original plan expected that 5 years would be needed to complete the land reclamation work, the term of the construction has at least doubled by this point. This time period would be further prolonged if the Defense Ministry faces any additional technical difficulties. The

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estimated total construction cost has almost tripled from the original 350 billion yen ($3.2 billion) to 930 billion yen ($8.5 billion).

3 The lack of construction vessels and the lack of reliable surveys at the actual construction site

One major technical issue that has already been revealed is the lack of construction vessels. While the deepest point of the soft seafloor in the FRF construction area reaches 90 meters (295 feet) below the sea level, no vessels in Japan have experience in placing the sand piles in such deep ocean areas for reinforcement work. A Japanese Diet member asked the former Japanese Defense Minister Takeshi Iwaya about his view on this lack of vessels at a Diet meeting in late February 2019. The former Minister answered that the Ministry will place the stabilization work in the seabed up to 70 meters down, considering the results of the geological survey. The survey concludes that the sea floor between 70- and 90-meters deep is composed of a very strong clayey layer and secure enough for the reclamation work.

However, the survey was not conducted at the deepest construction site, called the B-27 area, but at the nearby site, called the S-3 area. The B-27 and S-3 areas are about 150 meters (492 feet) away from each other and vary in depth. The Okinawa Prefectural Government and at least nineteen Japanese Diet members have questioned the technical reliability of the survey.

8 The Okinawa Times, “The Henoko soft seafloor was evaluated at another site” in Japanese, March 23, 2019, https://www.okinawatimes.co.jp/articles/-/399799
March 9, 2020

The Honorable Mark Thomas Esper
Secretary of Defense
United States Department of Defense
Washington D.C.
U.S.A. 20301-3010

Admiral Philip Scott Davidson
Commander, United States Indo-Pacific Command
Camp H.M. Smith, Hawaii, U.S.

Lieutenant General Kevin B. Schneider
Commander, United States Forces Japan and 5th Air Force
Yokota Air Base, Kanagawa, Japan

Lieutenant General Herman Stacy Clardy III
Okinawa Area Coordinator, Okinawa Area Field Office United States Forces Japan
Commanding General, III Marine Expeditionary Force
Camp Foster, Okinawa, Japan

Dear Secretary Esper, Admiral Davidson, Lieutenant General Schneider, Lieutenant General Clardy:

As I appreciate the U.S. Government’s commitment to the promotion of peace and democracy in the world and the U.S. Department of Defense’s endeavors in
that commitment, I have repeatedly conveyed to both the U.S. and the Japanese governments the democratic voice of the people of Okinawa against the construction of a new base in Henoko-Oura Bay in northern Okinawa as a replacement facility (the Henoko Plan) for the United States Marine Corps Futenma Air Station in Ginowan City, Okinawa.

Today, I write to direct your attention to two urgent situations related to construction work and to request that the U.S. Department of Defense take the initiative to cancel the Henoko plan and seek alternatives to the Henoko plan for removing the dangers of the Futenma Air Station imposed upon the people of Okinawa. To this end, I also request that the U.S. Department of Defense visit Okinawa as representatives of the U.S. Government and conduct on-site research on the soft seabed and others problems.

Dugongs
I am concerned that base construction has seriously impacted the Dugong, Okinawa' cultural icon, an endangered marine mammal, and a Japanese Natural Monument” and their precious habitat of Henoko-Oura Bay in possible violation of laws and regulations.

As the Bald Eagle is important to the U.S., so is the Dugong to Okinawa. In 1955, it was designated as one of its first Natural Monuments by the Government of the Ryukyu Islands during the U.S. military's occupation of Okinawa. At present, it is protected as an endangered species by Japanese laws and international conventions. It is designated and protected as a national Natural Monument by the Japanese Law for the Protection of Cultural Properties. Because of its designation as Japan's Natural Monument, the U.S. Federal District Court ruled in March 2005 in the “Dugong Case” that the dugong in Okinawa is protected by the U.S. National Historic Preservation Act (NHPA).

The waters of Okinawa Island is the only confirmed habitat for the dugong in Japan, making Okinawa the northernmost habitat for the world’s dugong population. Henoko-Oura Bay, one of the most biodiversity-rich marine areas in Japan, is critical for the survival of the world’s northernmost dugong population.

However, the Okinawa Defense Bureau of Japan and the U.S. Department of
Defense concluded that base construction and operation would have no adverse impacts on the dugong. With that conclusion, the Bureau set up floats in the water and began the landfill work in Henoko-Oura Bay in August 2014. Since then, we have seen alarming changes in the behavior of dugongs. According to survey reports by the Okinawa Defense Bureau, no dugong has been sighted since January 2015 at Oura Bay, where dugongs had been sighted in the past. The individual dugong known as Dugong C, which in the past had been frequently sighted along the coastal areas of northern Okinawa Island, including Oura Bay, has not been sighted anywhere since June 2015. Dugong A, which had been regularly sighted in Kayo, just north of Oura Bay, has also not been sighted since September 2018. This situation is counter to the conclusion drawn by the Okinawa Defense Bureau and the U.S. Department of Defense.

Now with the death of Dugong B, a female dugong, in the northwestern part of Okinawa Island in March 2019, the future of the dugong in Okinawa is in grave doubt. Responding to this alarming situation, in December 2019, the International Union for Conservation of Nature (IUCN) designated the dugong in waters off Okinawa and Nansei Islands as a "Subpopulation" and declared it "Critically Endangered" in its Red List of Threatened Species. IUCN pointed out that the construction of the new base at Henoko-Oura Bay is, among others, a threat to the dugong.

Regrettably, the Japanese Government has disregarded the Okinawa Prefectural Government's repeated calls for the protection of the dugong from base construction. Also regrettably, the late governor Takeshi Onaga's request for a consultation with the U.S. Department of Defense regarding the impact of base construction on the dugong under Section 402 of the U.S. NHPA has never been materialized. Immediate measures are needed to rectify this situation.

Fragile Seabed and Delay of Base Construction
I am also concerned that as the presence of extremely fragile seabed at the construction site makes the Henoko plan nonviable, the U.S. and Japanese governments’ insistence on the Henoko plan would irresponsibly delay the removal of the dangers the Futenma Air Station imposes upon the people of Okinawa.
In January 2019, the Japanese Government admitted that the Oura Bay side of the seabed at the base construction site is extremely fragile, requiring changes in construction design and major reinforcement work.

Regarding the construction, a number of problems could occur even if the reinforcement work was to be done, including: subsidence over a long period of time, the impact of the murky water from the construction site has on the environmental, and as an independent team of specialists pointed out, the possibility of a collapse of the revetment. According to the Japanese Government’s estimate, 71,000 sand piles need to be driven into the seabed as deep as 300 feet below the water surface. That would certainly bring about irreversible damages to the biodiversity-rich environment of Henoko-Oura Bay.

Recently in December 2019, the Japanese Government acknowledged that land reclamation work would take 9.3 years from the time of obtaining approval from the Governor of Okinawa for design changes, and the entire transition from the Futenma to the new facility would take at least 12 years to complete. The Japanese Government now sets its completion date in the 2030s, although I have no intention to approve changes in construction design.

It is incomprehensible that the Okinawa Defense Bureau’s Environmental Impact Assessment completed in 2012 did not address the issues of fragile seabed at all. It is troubling that the Bureau did not inform the prefectural government of the problematic conditions of the seabed until January 2019, 4 years after the start of construction. It is disturbing that the U.S. Department of Defense approved the construction plan and conducted its assessment of the impacts of base construction on the dugong and the environment without information on the fragile seabed. It is also disturbing that the Japanese Government is still reluctant to release full details on the fragile seabed. With all the technical difficulties and uncertainties associated with the fragile seabed, base construction will undoubtedly face more delays. Even if land reclamation and base construction were completed, according to experts, subsidence will occur, and the base might not properly function. The Henoko plan appears in conflict with the common understanding that the world situation and the U.S. military’s strategies are likely to change in the next 12 years. The U.S. and Japanese governments’ claim that “Henoko is the only solution” to remove the dangers of the Futenma Air Station is becoming less and less convincing.
I have raised doubts about those issues for quite a while. When I visited
Washington D.C., I raised such issues to the members of the U.S. Congress and
their assistants and requested that they confirm them with the Japanese
Government. I must point out that concerns and questions over the Henoko
Relocation Plan have been growing among the residents of Okinawa. This is
due to the problems the Okinawa Prefectural Government has been advocating
such as the impact on the dugongs and the prolonged construction schedule
because of the soft seabed.

Requests
Henoko-Oura Bay is far from an ideal site for a military base; it is a site for
international environmental conservation efforts. Please be reminded that over
5300 marine species, including 262 endangered species, inhabit the mere 13
square miles of Henoko-Oura Bay - an environmental miracle. The value and
wonder of the biodiversity in Henoko-Oura Bay are comparable to those of the
Papahânaumokuâkea Marine National Monument in Hawaii. It is the world's
second-largest marine protected area and a UNESCO World Heritage Site
(Cultural and Natural), where some 7,000 marine species thrive in its 583,000
square miles.

In fact, in October 2019, an environmental NGO Mission Blue of the U.S., led
by the renowned biologist Dr. Sylvia Earle, designated Oura-Bay and its
surrounding waters as a Hope Spot for its marine environmental significance
and uniqueness. Henoko-Oura Bay has now joined Florida Gulf Coast and
Monterey Bay as Hope Spots.

As Governor of Okinawa Prefecture, I have the responsibility, together with the
people of Okinawa, to protect and conserve the dugong and the environment of
Henoko-Oura Bay for its biological and cultural significance for future
generations. I believe that the U.S. Department of Defense also has the
responsibility under the NHPA, other U.S. laws, and agreements with the
Japanese government, to protect the dugong and the environment from the
construction and operation of the base.

I respectfully request that the U.S. Department of Defense take the initiative,
in consultation with the Japanese government, to cancel the Henoko plan and
that the U.S. Department of Defense take the initiative, in consultation with
the Japanese Government and the Okinawa Prefectural Government, to seek alternatives to the Henoko plan. To this end, I also request that the U.S. Department of Defense visit Okinawa as representatives of the U.S. Government and conduct on-site research on the soft seabed and others problems.

Respectfully yours,

Denny Tamaki  
Governor of Okinawa Prefecture  
Japan

cc:

   Mr. John M. Fowler, Executive Director  
   The U.S. Advisory Council on Historical Preservation

   Dr. Peter O. Thomas, Executive Director  
   The U.S. Marine Mammal Commission

   Congressman David Adam Smith  
   Chair of the House Armed Services Committee

   Senator James Mountain Inhofe  
   Chair of the U.S. Senate Committee on Armed Services

   Mr. Eugene Louis Dodaro  
   Comptroller General of the U.S. Government Accountability Office
The Okinawa Prefectural Government’s Suggestions related to the National Defense Authorization Acts for FY 2020 and FY 2021

March 13, 2020
The Okinawa Prefectural Government

In December 2019, the Japanese government announced that both the cost and time to construct the Futenma Replacement Facility (FRF) in Okinawa will be double what was originally estimated due to significant technical issues caused by the discovery of the soft seabed at the construction site.\(^1\) The Okinawa Prefectural Government remains concerned that this has the potential to negatively affect implementation of future U.S. defense strategies and plans in the Indo-Pacific, which primarily aim to address China’s military aggressiveness. There has also been strong local opposition to the construction plan because of the potential impact on the local communities.

To minimize further technical, operational and political risks surrounding the FRF, the Okinawa Prefectural Government recommends the following three actions in the context of implementing the National Defense Authorization Act (NDAA) for FY 2020 and discussing the FY 2021 NDAA.

1. Under section 1255\(^2\) of the FY 2020 NDAA, the Okinawa Prefectural Government requests that Congress make a formal request to the Government Accountability Office (GAO) to assess the future outlook of Japan’s monetary and labor force contributions to the FRF construction activities, especially the activities in response to the technical challenges that are causing the construction delay, as well as the implications of the construction delay for U.S. Marines’ operations in the Indo-Pacific region.

2. Regarding section 1260k\(^3\) of the FY 2020 NDAA, the Okinawa Prefectural Government hopes Members of Congress, particularly members of the Senate and House Armed Services Committees, pay special attention to the status of projects that have both direct and indirect impacts on the day-to-day activities of U.S. Marines stationed in Okinawa as well as local residents.

3. In the process to finalize the FY 2021 NDAA, the Okinawa Prefectural Government hopes that Members of Congress will seek to address environmental and health issues surrounding the U.S. military bases in Okinawa that would affect the U.S. Marines and Okinawans. These issues may include accidents and incidents, environmental pollutions, and PFAS contamination in local areas.

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2 “Sec. 1255. Report on direct, indirect, and burden-sharing contributions of Japan and South Korea.” mandates the U.S. Comptroller General to submit a report on the burden-sharing contributions by Japan and South Korea to support the U.S. Force’s operations https://www.congress.gov/bill/116th-congress/senate-bill/1790/text
April 13, 2020

The Honorable Adam Smith  
Chairman  
House Armed Services Committee  
2264 Rayburn House Office Building  
Washington, DC 20515

Dear Chairman Smith,

On behalf of the people of Okinawa, I wish to convey sincere sympathy for the people of the United States during this terrible pandemic. We are confident that your leadership will help to guide the country through these difficult times.

I write to you regarding implementation of the FY2020 National Defense Authorization Act (NDAA) and the forthcoming development of the FY2021 NDAA. The attached letter describes the recent findings regarding technical and cost issues facing the construction of the Futemna Replacement Facility (FRF) in Okinawa. My government remains concerned that these unforeseen issues will adversely affect the construction of the FRF and thus, implementation of successful U.S. defense strategies in the region. The letter outlines recommendations that we hope Congress will take into account in order to minimize any further technical, operational, and political risks surrounding the project.

Okinawa Prefecture Washington DC Office would be pleased to discuss these suggestions further with your office should you wish to gather additional information on our recommendations. Please let us know if the Prefectural Government can be of any further assistance as the committee works to reauthorize this important legislation.

Thank you very much for your kind time and attention.

Sincerely,

Denny Tamaki  
Governor of Okinawa Prefecture, Japan

Received by NSD/FARA Registration Unit 07/27/2020 3:22:35 PM
Commanding General, III Marine Expeditionary Force
Lieutenant General H. Stacy Clardy III,

Regarding the Leakage Accident of the Fire Fighting Foam that Contains PFOS at Futenma Airfield (Protest)

On April 10, 2020 an incident occurred where the fire extinguishing system in a hanger at MCAS Futenma activated and the fire fighting foam that contains PFOS leaked outside the base.

A leakage accident occurred last year in December where fire fighting foam leaked at the same airfield. We were informed that the Force conducted re-training to all military personnel and employees who handle the relevant equipment to ensure a similar accident will not happen.

Nonetheless yet another leakage accident occurred where the fire fighting foam that contains PFOS leaked. We must say the measures that the Force took were not efficient. For the residents who are forced to live side-by-side with the U.S. military bases this is very concerning and should never have happened. It is very regrettable that it did.

According to the survey conducted by the Department of Environmental Affairs and Enterprise Bureau of OPG in recent years, a high level of PFOS has been detected from the springs in the vicinity of MCAS Futenma and rivers near the Kadena Air Station. The OPG has been requesting to conduct on-site surveys on the base but the U.S. Forces have not permitted the request.

We believe this is an accident where an article in the Agreement on Environmental Stewardship Supplementary to the Japan-U.S. SOFA that states “following a contemporaneous environmental incident, i.e., a spill” is applicable, and there is a need to promptly conduct an on-site survey.

Therefore, the OPG strongly protest against the leakage accident and request the following:

1. Promptly allow on-site surveys upon the Okinawa Prefectural Government's request based on the Agreement on Environmental Stewardship Supplementary to the Japan-U.S. SOFA.
2. Promptly collect the contaminants that leaked outside of the base as well and secure the safety of the residents, as well as establish spill response procedures in case of an accident.
3 Conduct environmental surveys and take necessary actions at the site, rivers, and waters to which the contaminants leaked, and disclose the results of the surveys.

4 Investigate, disclose, and provide a detailed report on the cause of the accident.

5 Switch the fire fighting foam to another product that doesn’t contain PFOS at an earliest possible time.

6 Put in place fully effective preventive measures.

Denny Tamaki
Governor of Okinawa Prefecture
知基第１９号
令和２年４月１７日

第３海兵遠征軍司令官
Ⅱ. ステーシー・クラーディ三世 殿

沖縄県知事 玉城 デニー

普天間飛行場におけるPFOSを含む泡消火剤の漏出事故
について（抗議）

令和２年４月10日、海兵隊普天間飛行場において、格納庫の消火システム
が作動し、PFOSを含む泡消火剤が基地外へ漏出する事故が発生しました。

同飛行場では、昨年12月にも泡消火剤の漏出事故が発生しており、再発
防止のため関連する装置を抜うすべての軍人と雇用者へ再教育を徹底した
とのことであります。

それにもかかわらず、今回、再びPFOSを含む泡消火剤が漏出する事故が
発生したことは再発防止策が不十分なものであると言わざるを得ず、また、
このような事故は、日常的に米軍基地と隣り合われる生活を余儀なくされ
ている県民にとって大きな不安を与えるものであり、決してあってはなら
ず、大変遺憾であります。

また、近年の沖縄県環境部及び企業局の調査では、普天間飛行場周辺の
湧水や嘉手納飛行場に隣接する河川等から高濃度のPFOS等が検出されてお
り、県が基地への立入調査等を求めるにもかかわらず、米軍はこれまで
に立ち入りを認めておりません。

今回の一事件については、環境補足協定で規定する「環境に影響を及ぼす
事故（すなわち、漏出）が現に発生した場合」に該当するものと認識して
おり、速やかに基地内への立ち入り調査を実施する必要があると考えてお
ります。

ついては、今回の事故に強く抗議するとともに、下記の事項について、
要請します。

記
１ 県が求める環境補足協定に基づく基地内への速やかな立ち入り調査の
実現
２ 基地外における原因物質を速やかに回収し、住民の安全を確保すると
ともに、汚染事故発生時の除去体制を構築すること
３ 漏出現場、漏出先河川・海域等における環境調査と必要な措置の実施
及び結果の公表
４ 事故原因の究明と詳細な説明及び公表
５ 早期のPFOS等を含まない泡消火剤への切り替え
６ 実効性ある再発防止策の徹底
Okinawa Prefectural Government’s Requests related to the Leak of PFOS-containing Firefighting Foam from MCAS Futenma

May 27, 2020
Okinawa Prefectural Government

1. Background
On April 10, approximately 60,000 gallons of potentially toxic firefighting foam leaked from a hangar at Marine Corps Air Station Futenma (MCAS Futenma) in Okinawa wherein 38,000 gallons spilled into nearby communities. According to U.S. military officials in Japan, this foam, which is used at MCAS Futenma, contains the man-made chemical PFOS (perfluorooctanesulfonic acid),¹ which is prohibited from being manufactured, imported, or used in Japan due to its high health risks to the human body. The U.S. Environmental Protection Agency (EPA) has established health advisories for PFOS² in drinking water and recently proposed to take further actions to regulate PFOS in drinking water.³

The foam that leaked from MCAS Futenma subsequently floated around the local community through the air and poured into the rivers. It also streamed into the base’s drainage system or was absorbed into the ground. Because of the health risks, local residents were advised not to touch the floating foam immediately after the incident. The residents have expressed strong concerns over the situation, especially because the U.S. military has not removed the floating foam from their communities and local rivers.

Figure 1 Firefighting foam floating from MCAS Futenma to local communities (April 11-12)⁴

This is the second time in less than six months in which this particular type of foam, called aqueous film-forming foam (AFFF), has leaked from MCAS Futenma. This time, unlike the first time, the foam discharge was clearly visible to local communities. There have been at least four similar cases at Kadena Air Base in the last eight years, and the cases are estimated to have affected drinking water sources of

³ https://www.epa.gov/newsreleases/epa-announces-proposed-decision-regulate-pfoa-and-pfos-drinking-water
⁴ http://english.ryukyushimpo.jp/2020/05/03/31919/; https://ryukyushimpo.jp/news/entry-1105838.html#prettyPhoto
about 450,000 people residing near the base, including local Okinawans along with U.S. service members and their families.

Table 1 Spills of PFOS-containing Firefighting Foam from U.S. military bases in Okinawa

<table>
<thead>
<tr>
<th>Date</th>
<th>Original location</th>
<th>Leaked foam amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2020</td>
<td>MCAS Futenma</td>
<td>60,000 gallons</td>
</tr>
<tr>
<td>December 2019</td>
<td>MCAS Futenma</td>
<td>10,000 gallons</td>
</tr>
<tr>
<td>August 2017</td>
<td>Kadena Air Base</td>
<td>3 gallons</td>
</tr>
<tr>
<td>September 2014</td>
<td>Kadena Air Base</td>
<td>2 gallons</td>
</tr>
<tr>
<td>December 2013</td>
<td>Kadena Air Base</td>
<td>600 gallons</td>
</tr>
<tr>
<td>August 2012</td>
<td>Kadena Air Base</td>
<td>300 gallons</td>
</tr>
</tbody>
</table>

The Okinawa Prefectural Government has also detected high concentrations of PFOS in the underground water near MCAS Futenma and in rivers near Kadena Air Base and allocates approximately $3 million (0.3 billion yen) every year to remove PFOS chemicals from local drinking water. The association between those incidents at U.S. military bases in Okinawa and the high concentration of PFOS in local waters has not been clearly verified because the U.S. military typically does not give the Okinawa Prefectural Government permission to perform on-site investigations inside the bases.

While this time, as of May 13, 2020, the U.S. military has allowed officials from the Japanese national government, the Okinawa Prefectural Government, and local authorities to conduct four rounds of on-site investigations inside MCAS Futenma. However, the military has imposed strict limitations on these investigations, especially regarding the number of survey sites and target chemicals, which makes it difficult to capture the holistic picture of the incident. The Okinawa Prefectural Government is currently only allowed to investigate the levels of PFOS and PFOA (perfluorooctanoic acid) at certain locations. Any other chemicals that may be contained in AFFF and could have health or environmental impacts, such as PFHxS (perfluorohexane sulfonate) and 6:2 FTS (6:2 fluorotelomer sulfonate), are not allowed to be investigated.

2. Requests to Congress
The Okinawa Prefectural Government hopes that members of Congress will consider this incident seriously and seek to develop measures to accelerate post-incident investigations that aim to help prevent similar incidents at the U.S. military bases in Okinawa. The Okinawa Prefectural Government would appreciate Congress’s support in persuading the U.S. military to take the following actions:

- Promptly allow the Okinawa Prefectural Government and local authorities full access to all survey sites to conduct post-incident investigations.
- Conduct environmental surveys and take any necessary actions at the site, as well as off-base rivers and nearby waters in which the contaminants have leaked, and disclose the survey results.
- Investigate and provide a detailed report about the causes of the accidents, as initial investigations did not yield enough information to adequately provide these reports.
- Promptly replace AFFF used in the U.S. military bases in Okinawa with safer products that do not contain PFOS.
- Develop and institute effective preventative measures.
Different Views on the Progress of the Construction Work to Build the Futenma Replacement Facility (FRF)

January 28, 2020
The Okinawa Prefectural Government

Background
The U.S. and Japanese governments have agreed to replace the U.S. Marine Corps Air Station Futenma (MCAS Futenma) that is currently located on Okinawa, which will now move from a densely populated area to the northern part of the prefecture called Henoko. The Futenma Replacement Facility (FRF) is now currently under construction at the Henoko site, but faces multiple technical issues, since the construction project requires large-scale land reclamation work to build an offshore V-shaped runway. Specifically, these issues include:

1. The soft seabed at the FRF site and the potential impacts to the Marines’ operations
2. The construction time has doubled, and the construction cost has nearly tripled
3. The lack of construction vessels and the lack of reliable surveys at the actual construction site

This memo describes the differing views about these issues from the Okinawa Prefectural Government and the Japanese Government and addresses the potential risks and delays related to the construction work. The Prefectural Government’s views are supported by Japanese Diet members, and technical advisors for the Japanese Ministry of Defense, which has primary responsibility for the project implementation also refer to it. In fact, nineteen Japanese Diet members have asked questions about these issues to the Japanese government.

These potential risks and delays would have an impact on the U.S. Marine Corps’ future operations at the FRF, as well as the facility’s maintenance work, which would be funded and managed by the U.S. Department of Defense. The Okinawa Prefectural Government hopes that the U.S. government will conduct its own review regarding the progress and feasibility of the construction project.

1 The soft seabed at the FRF site and the potential impacts to the Marines’ operations
In early 2019, the Japanese government acknowledged the existence of the soft seabed at the land reclamation site in Henoko. The soft seabed is expected to increase the risk of subsidence and would require numerous maintenance projects over the course of 50 years (the FRF’s estimated lifecycle) if the relevant preventative measures are not taken, according to the technical advisors for the Japanese Defense Ministry. Those experts also implied the potential impact of the uneven subsidence caused by the soft seabed on the future operations of the runways that will be built on top of the reclaimed land and used by the U.S. Marine Corps.1

2 The construction time has doubled, and the construction cost has nearly tripled
In late December, the Japanese Defense Ministry announced that it will need about 10 years to complete the land reinforcement work for the soft seabed and the reclamation work to construct the FRF in Henoko.4 Since the original plan expected that 5 years would be needed to complete the land reclamation work, the term of the construction has at least doubled by this point. This time period would be further prolonged if the Defense Ministry faces any additional technical difficulties. The

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estimated total construction cost has almost tripled from the original 350 billion yen ($3.2 billion) to 930 billion yen ($8.5 billion).

3 The lack of construction vessels and the lack of reliable surveys at the actual construction site

One major technical issue that has already been revealed is the lack of construction vessels. While the deepest point of the soft seafloor in the FRF construction area reaches 90 meters (295 feet) below the sea level, no vessels in Japan have experience in placing the sand piles in such deep ocean areas for reinforcement work.⁶ A Japanese Diet member asked the former Japanese Defense Minister Takeshi Iwaya about his view on this lack of vessels at a Diet meeting in late February 2019. The former Minister answered that the Ministry will place the stabilization work in the seabed up to 70 meters down, considering the results of the geological survey. The survey concludes that the sea floor between 70- and 90-meters deep is composed of a very strong clayey layer and secure enough for the reclamion work.⁷

However, the survey was not conducted at the deepest construction site, called the B-27 area, but at the nearby site, called the S-3 area. The B-27 and S-3 areas are about 150 meters (492 feet) away from each other and vary in depth.⁸ The Okinawa Prefectural Government and at least nineteen Japanese Diet members have questioned the technical reliability of the survey.

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⁸ The Okinawa Times, “The Henoko soft seabed was evaluated at another site” in Japanese, March 23, 2019, [https://www.okinawatimes.co.jp/articles/-/399799](https://www.okinawatimes.co.jp/articles/-/399799)
The above aerial photo shows two active faults that experts have pointed out its existence. One of them crosses the beneath of the runway of the Henoko new base and is extremely dangerous.
Reference C: Sectional view of geological layer of the sea walls at east side

This picture shows the sectional view of geological layer of the sea walls at east side. It shows the soft seabed reaches as deep as 90 meters below sea level at maximum.

Once again, I would appreciate your understanding about current situation in Okinawa. Also, I would like you to work on the person concerned on this matter.