The Honorable Gerald M. Zackios
Minister of Foreign Affairs,
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Testimony
Before the Committee on Resources and the Subcommittee on Asia and Pacific of the
International Relations Committee
United States House of Representatives

Hearing on the United States Nuclear Legacy in the Marshall Islands: Consideration of Issues Relating to the Changed Circumstances Petition

May 25, 2005

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Chairman Pombo, Chairman Leach, Distinguished Members of the House Committee on Resources and the Subcommittee on Asia and Pacific of the House International Relations Committee:

I am accompanied here today by the Minister of Health, Alvin T. Jacklick, and the Senators and Mayors of the 4 atolls most affected by the U.S. Nuclear Weapons Testing Program.

On behalf of President Kessai H. Note and the Government of the Republic of the Marshall Islands (RMI), I want to thank this Committee and Subcommittee for conducting a hearing on the legacy of the U.S. nuclear weapons tests in the Marshall Islands and the RMI's Changed Circumstances Petition (CCP) (Map I). This hearing is one of many which Congress and the RMI have developed to establish a record of our efforts to address the full range of needs linked to the U.S. Nuclear Weapons Testing Program. Today I will focus my remarks on the RMI's specific requests in the CCP, issues of equity, and new information about the consequences of radiation exposure that compel all of us to update our understanding of the effects of the U.S. Nuclear Weapons Testing Program in the RMI. I will also explain the reasons why the RMI government strongly contests the findings of the U.S. State Department staff in its report regarding the CCP. But first let us consider the fundamental reason for our coming together today.

The Compact of Free Association is perhaps the closest strategic alliance ever defined by a treaty between the U.S. and another nation. We have always stood with the United States in its wars on terror – the terror of the Soviet threat during the Cold War, and today's war on terror where our sons and daughters are serving side-by-side with U.S. troops in every branch of your armed services. Today, U.S. military facilities in the RMI make your homeland, our islands and the entire world safer every day. No other nation in the world stands behind the U.S. more at the United Nations. We have a proud record of working hand-in-hand with the U.S. to deliver key votes in that world body.

The only reason we are meeting today is because of an enduring problem resulting from the U.S. Nuclear Weapons Testing Program. This problem – human suffering and land damages that remain uncompensated, along with ongoing public health challenges that overwhelm our capabilities – was actually anticipated by your committees nearly two decades ago. Recognizing the solemn responsibility to address the repercussions of America's nuclear weapons research, your predecessors joined with our leaders in efforts that over the past 19 years have been positive, but piecemeal, and ultimately inadequate given the enormity of the impact that continues to emerge – as radiation-related illnesses appear to this day in much higher quantities than otherwise would be the case.

As directed by Congress back in 1986, we are today presenting these circumstances – and our estimate of what is required to address them – in the form of a petition. But regardless of the form and legal framework in which they are presented, the reality is that we are seeking your continued partnership as we work to cope with these serious matters.

This sad fact was made all the more serious when the National Cancer Institute (NCI) verified last September that hundreds of radiation-related deaths from throughout the Marshall Islands are still expected in coming years. Consequently, the RMI government asks for your continued assistance to:

- address the healthcare needs of all populations exposed to significant levels of radiation in the Marshall Islands – an area broader than just the 4 atolls currently recognized by the U.S. government as exposed to radiation.
- provide the Nuclear Claims Tribunal with the funding it needs to provide compensation for the personal injury and private property damage claims it has awarded, as mandated by Congress in the Section 177 Agreement that is part of the Compact of Free Association between our two nations. If Congress determines the private property awards involve issues of fact or law that require further evaluation or adjudication are too large or complex for Congress to consider, the RMI government supports the referral of these claims to the U.S. courts in a manner prescribed by Congress to determine the merits of those awards. Until these claims are addressed as intended in the 177 Agreement, there can be no full settlement for the damages and injuries sustained in the RMI.
- create a long-term stewardship plan for its nuclear waste storage facility on Runit Island as it would be required to do in the United States.

Based on the standards for addressing similar radiation problems with American citizens, and pursuant to the Compact of Free Association, P.L. 99-239, the RMI is seeking additional assistance as provided by Congress in the Section 177 Agreement of the Compact. The RMI government is open to working with Congress and the Administration to explore all avenues to address the needs of the people in the RMI affected by the detonation of 67 atomic and thermonuclear weapons within our boundaries during the time that the U.S. government was the sole legal authority governing our territory. We thank the U.S. Department of Energy for its willingness to address lingering needs to the best of its ability within the limited scope of its mandate from Congress as well as the ex gratia assistance extended by Congress from time-to-time. Despite these best efforts, however, there are still gaping needs linked to the U.S. Nuclear Weapons Testing Program in our homeland.

However, it is now apparent that neither the ratification of the Compact in 1986 nor the 20 year renewal of the Compact in 2003 has fully resolved the legacy of U.S. nuclear testing in our islands from 1946 to 1958. Instead, our governments must continue to meet our on-going commitments under the original nuclear claims settlement pursuant to Section 177 of the Compact, and other mutually agreed measures.

For our governments to make full and final resolution of the nuclear testing claims a part of the Compact success story, Congress must remember the obligations openly and affirmatively undertaken in the Section 177 Agreement in 1986.

When Congress approved the Compact, it insisted on retaining unprecedented and extraordinary jurisdiction over these claims under the changed circumstances provisions of Article IX of the Section 177 Agreement; the changed circumstances provisions are not a narrowly restricted and purely legalistic standard as argued by U.S. State Department staff in response to the RMI Changed Circumstances Petition. This unprecedented claims settlement was proposed by the U.S. to provide an alternative to litigation of these claims in the U.S. courts in order to avoid delay of U.S. strategic programs at Kwajalein Atoll at the height of the Cold War.

Between 1986 and the present, the Section 177 settlement has been substantially, but only partially, implemented. It has been a success in the sense that it terminated court cases and allowed the U.S. to carry out strategic programs in the RMI that helped end the Cold War. The RMI reluctantly, but in good faith, accommodated the U.S. bottom line in the Compact negotiations, but we did so only because the U.S. agreed in the Section 177 Agreement to work with the RMI, "…to create and maintain in perpetuity, a means to address past, present and future consequences of the nuclear testing program, including the resolution of resultant claims."

The term "full settlement" has been hijacked in the State Department staff report to argue that the Section 177 Agreement was a simple payment of $150 million to terminate the federal court cases that were headed for a scheduled trial date in 1984 – that was not the intent of Congress of the past administrations. The RMI would never have accepted the initial $150 million payment as a full settlement. That amount was politically determined and not tied to any known or attempted estimate of actual damages. Rather, the RMI agreed to the settlement only because the U.S. agreed in Section 177 to "just and adequate" compensation in the settlement of all claims. The Section 177 Agreement included establishment of a Nuclear Claims Tribunal to adjudicate all claims fully, in order to ensure adequacy of compensation based on actual computation of damages through an alternative judicial process.

Our knowledge of the extent of injury to our people and damage to our lands has increased, due in part to new information released by the U.S. and expertise developed by the Tribunal. The inadequacy of the Section 177 compensation, including the trust fund for claims, and measures to address the health needs of our people has become more obvious. If Nuclear Claims Tribunal awards are allowed to become worthless, then the creation of the process will have been a hoax.

We believe that on balance the report by the Congressional Research Services is a much fairer and more objective summary, and provides a good starting point for addressing issues outlined in the CCP.

History/Background:
Most people in the world think about Hiroshima when they think about nuclear devastation. We can imagine the buildings that were leveled, and the incineration of all living things – images we associate with wartime. When people think about the Marshall Islands, however, they do not seem to conjure any sense of what nuclear weapons did to the country or the people. Yet, how many people in the United States are aware that the Marshall Islands experienced the equivalent of 1.6 Hiroshima-sized bombs every single day during the 12 years that the U.S. government detonated nuclear weapons in our country? In terms of radioactive iodine alone, 6.3 billion curies of iodine-131 was released to the atmosphere as a result of the nuclear testing in the Marshall Islands – an amount 42 times greater than the 150 million curies released by the atmospheric testing in Nevada, 150 times greater than the estimated 40 million curies released as a result of the Chernobyl nuclear accident, and 8,500 times greater than the 739,000 curies released from Atomic Energy Commission operations at Hanford, Washington (Graph I – comparison of radiation levels).

From 1946 to 1986, the U.S. Government exercised all powers and determined all functions of government in the Marshall Islands. With the exception of the brief period of military rule after liberation of the islands from Japan, from 1947 to 1986 the people of the Marshall Islands had only those legal, political and citizenship rights prescribed pursuant to U.S. federal law.

The United States government was the administrating authority for the people of the Marshall Islands from 1945-1986. As the colonial power, the U.S. government maintained tight control over all information about the activities that took place on our islands, particularly the top secret scientific data related to the nuclear weapon testing activities. This scientific data documented literally every impact of radiation and nuclear detonations on an island ecosystem and its people, but remained hidden from Congress, the U.S. public, and the Marshallese people for decades. When documents were declassified by the U.S. government in the early 1990's, information became available that was not known to the RMI government and its negotiators during discussions beginning in the late 1970s to terminate the trusteeship and to establish our Compact with the United States.

This is precisely the situation that Congress foresaw when it envisioned the CCP mechanism. Based on new information gathered from U.S. government documents, and scientific and medical advancements about radiological safety, clean-up, and the effects of radiation on health -- information that was not

previously known to the RMI government and its Compact negotiators -- the RMI government submitted its Changed Circumstances Petition to you, the U.S. Congress.

History of the U.S. nuclear weapons testing program in the RMI
During World War II, the United States wrested control of the Marshall Islands from a brutal Japanese military regime, and the U.S. Navy became the administering authority for the Marshall Islands in 1945. In 1947, the United Nations placed the administration of the Marshall Islands with the United States government as the Marshall Islands became a part of the United Nations Trust Territory of the Pacific Islands (TTPI). From 1946-1958, the United States detonated 67 atomic and thermonuclear weapons in the Marshall Islands. The tests were designed to produce as much local fallout as possible both to allay international concerns about global fallout and to create a scientific laboratory in the Marshall Islands where U.S. government researchers could study the effects of radiation on the oceans and lagoons, the land, and the Marshallese people.

Of this arsenal of 67 weapons, 18 of the detonations were in the megaton range. The largest of all the tests was the Bravo detonation of March 1, 1954. Bravo turned out to be the largest nuclear weapon ever detonated by the United States government. The fifteen-megaton test created a mushroom cloud 25 miles in diameter. The force from the weapon pulverized coral, coconut trees and any objects in its path, and the unleashed energy gathered debris into the mushroom cloud where it mixed with radioactive materials. When the force of the weapon subsided and the cloud's materials fell to the ground – what we refer to as radioactive fallout -- it coated the seas, islands, food crops, water catchments, houses, animals, and people.

Marshallese encounters with the bombs did not end with the detonations themselves. U.S. government documents released in the 1990s show us that the U.S. government exposed Marshallese citizens to radiation from nuclear weapons to study the effects of radiation on human beings so the U.S. would better understand the impacts of a nuclear war on U.S. soil, or the effects of radiation on its troops if an enemy detonated a nuclear weapon during combat. For one series of tests prior to Operation Castle in 1954, the U.S. government evacuated inhabited communities downwind from the ground-zero locations as a precaution, communities living on Rongelap, Ailinginae, Rongerik, Wotho, and Enewetak. When the U.S. detonated its largest thermonuclear weapon, Bravo, however, it decided not to evacuate communities directly downwind from the proving ground and redrew its maps of the evacuation area to exclude the inhabited islands of Rongelap.

U.S. personnel did not return to evacuate the Rongelapese until more than two days after they knew that radiation had coated the islands. After evacuation, the U.S. placed the "exposed" people of Rongelap and the community of Utrik into a secret medical study, called Project 4.1, to understand the effects of radiation on human beings. A notation for this study appeared in a 1953 document planning the scientific tests in conjunction with the Bravo test the next year (Joint Task Force 7, 1953). The U.S. government also chose a "control" population as part of its study – people who were later injected with or told to drink radioactive substances for comparative study purposes (Advisory Committee on Human Radiation Experiments 1995). Groups of people, such as the Ailuk community, were not evacuated after the Bravo event (although they were exposed to levels of radiation sufficient to warrant evacuation) because the atoll's population of 401 people at the time was considered too large and cumbersome to evacuate. The people of Ailuk, Likiep and other neighboring atolls that received high doses of radiation remained in their radiation-laced environments without medical attention or efforts to reduce exposure to radiation.

The current Administration position
As noted in it's report to Congress in response to the RMI's CCP, the State Department feels that there are no changed circumstances, that radiation remains limited to just four inhabited atolls in the Marshall Islands (as outlined in the DOE survey of 1978), and that the $150 million provided in 1986 as a

downpayment for damages and injuries for the testing program represents a full settlement. The RMI government strongly disagrees with these conclusions by the State Department. Specifically, we believe that:

- more damages and injuries occurred than have been recognized by the U.S. government;
- understandings about radiation affects, clean-up and public safety have advanced dramatically, resulting in the need to update U.S. policy toward radiation exposure in the RMI, and;
- the 177 Agreement is only a full settlement once all of the intents of the Agreement have been achieved.

As stated earlier, several intentions of the 177 Agreement have not come to fruition and once again require the attention of Congress.

Earlier this year, President Note outlined some of the RMI's major points of contention with the State Department report, including the following:

1. *Tribunal*. The State Department assertion that the Nuclear Claims Tribunal (NCT) established under U.S. Public Law 99-239 exceeded its scope of work by compensating illnesses not recognized by the U.S. Radiation Exposure Compensation Act (RECA) is misleading. For example, radiation sickness and beta burns that are not a factor for U.S. testing victims were compensated by the NCT. Similarly, the assertion by departmental staff that the extent of damage to private property (including clean-up costs) could have been known at the time the Compact was negotiated is easily disproved based on changing safety and environmental standards, as well as actual experience with clean-up costs in both U.S. domestic and RMI radiologically contaminated sites. The RMI recognizes that the proceedings of the Tribunal involved difficult and contentious issues, similar to adversarial litigation in U.S. courts. However, the independent assessment of the Nuclear Claims Tribunal's record and proceedings made by former U.S. Attorney General Richard Thornburgh in 2003 confirmed that the Tribunal adhered to American standards of jurisprudence, and concluded that the funds available to compensate for private property damage and loss, and personal injury were "manifestly inadequate." I would like to enter the Thornburgh report to be included as part of the hearing record.

2. *Exposure Levels*. Congress should not accept the assertion that only the 4 atolls were subjected to high levels of radiation exposure. The Breslin-Cassidy Report of 1955 (cited in the State Department report, but only in reference to Rongelap) shows that many atolls and islands within the Marshall Islands were exposed to high levels of radioactive fallout and contamination well beyond safe levels (Graph II – 1955 doses for the mid-range atolls from the Castle series). The Breslin-Cassidy Report, among others, was classified at the time the Section 177 Agreement was concluded, and only became available in 1994. This is a changed circumstance.

Furthermore, at the time of the 177 Agreement, the acceptable dose limit for a member of the public was 500 mrem per year. The current dose limit and clean-up criteria specified by the U.S. Environmental Protection Agency (EPA) and adopted by the Nuclear Claims Tribunal is 15 mrem per year. This reduction in acceptable exposure levels is a changed circumstance. Similarly, the current U.S. EPA standard for radiological safety needs to be compared to the present U.S. position pertaining to the RMI which remains affixed to the standards of a 1978 DOE survey of the 14 northern-most atolls in the RMI. That survey, and other information, served as the basis for determining which areas and populations were exposed to excessive amounts of radiation in the RMI, thus warranting U.S. government assistance per the Compact. When applying the U.S. EPA's 15 mrem standard of maximum acceptable exposure to the 1978 survey information that is the basis of the 177 Agreement, U.S. government data clearly reveals that residents of the following atolls were expected to be exposed over a three month period to levels of radiation far in excess of the 15 mrem annual standard (Graph III – 1978 DOE doses):

Rongelap	-	400 mrems per year
Ailinginae	-	270 mrems per year
Mejit	-	100 mrems per year
Ailuk	-	90 mrems per year
Utrik	-	75 mrems per year
Likiep	-	75 mrems per year
Jemo	-	50 mrems per year
Wotho	-	30 mrems per year
Ujelang	-	20 mrems per year

It should also be noted that of the above listed atolls, only Rongelap, Ailinginae, and Utrik have been eligible for DOE medical or environmental monitoring programs. Graph III compares DOE doses for mid-range atolls to the current U.S. standard of 15 mrem. We believe that the healthcare needs of the mid-range atolls should be reconsidered based on DOE's own data. This 1978 survey provides data for just the 14 northern-most atolls and does not include dose estimates for other inhabited atolls, particularly inhabited areas in close proximity to those listed above. Furthermore, the survey only provides dose estimates for 1978 and does not address the issue of exposure levels on inhabited atolls that were even higher prior to 1978, particularly in the 1950s when all 18 of the megaton tests occurred and people resided on these islands. A 1955 U.S. government document that tallies the cumulative exposures from all 6 tests in the Castle series, including Bravo, lists the exposure levels for some of the same atolls listed above (Breslin and Cassidy 1955), including:

Rongelap	-	202,000 mrems
Ailinginae	-	67,000 mrems
Ailuk	-	6,140 mrems
Utrik	-	24,000 mrems
Likiep	-	2,196 mrems
Jemo	-	1,978 mrems
Wotho	-	784 mrems

These exposure levels would certainly be higher if the remaining 61 tests were factored in. It should also be noted that an atoll-specific approach to radiation exposure, as instigated by the 1978 survey, fails to consider the exposure levels of Marshallese laborers who worked for DOE on Bikini and Enewetak to assist with the clean-up efforts of the ground zero locations. In addition to not being eligible for U.S. funded healthcare, these workers are not eligible for any U.S. government programs to monitor their health, and were recently deemed ineligible to participate in a U.S. Department of Labor (DOL) compensation program for DOE workers exposed to radiation because they are not U.S. citizens – despite the fact that they were citizens of the U.S. trust territory when they were employed as DOE contractors. In comparison, American citizens who are eligible for this program receive $150,000 in compensation plus future medical coverage, including doctor and hospital visits, medical treatments, diagnostic laboratory testing, prescription drugs, and other benefits.

The RMI government does not contest the scientific data gathered by DOE in 1978. However, it is essential that this data be reviewed, interpreted, and compared to updated knowledge about the effects of radiation and current U.S. standards for ensuring public safety.

3. Standards. Congress should reject the State Department's attempt to apply a less rigorous standard of environmental safety for the Marshall Islands than the U.S. Government applies to communities in the United States exposed to radiation, such as Yucca Mountain. In a press release dated June 6, 2001,

Former EPA Administrator, Christie Whitman, calls the 15 mrem a year statement "very stringent public and health and environmental protection standards for Yucca Mountain." She went on to say:

> These are strong standards and they should be. We designed them to ensure that people living near this potential repository will be protected – now and for future generations… They are designed to protect the residents closest to the repository at levels that are within the agency's acceptable risk range for environmental pollutants. This corresponds to a dose limit of no more than 15 millirem per year from all pathways.

In a country with just 70 square miles of land, private property is our most precious legacy and defines who we are as people – land provides the blueprint for our social and kinship networks and for our rights to cultivate resources. Landowners in the Marshall Islands require all the resources available to them to support their families. For the atolls contaminated with radiation, the question then becomes: to what level should the atoll be cleaned to protect human health and the environment? How are we to compensate our citizens for one of the key building blocks of society – private property?

In the U.S., the EPA has answered that question employing clean-up standards that keep resulting risks of cancer incidence within range of 1 in a million, and 1 in 10,000. Such a clean-up standard is applicable to any residual contaminant, whether it is chemical or radionuclide. For example, the standard for clean-up after the attack on the World Trade Center was at the 1 in 10,000 risk range. With regard to radionuclides, the EPA has determined that the lower end of the risk range (1 in 10,000) translates into a clean-up level of approximately 15 mrem per year. This new standard is a changed circumstance.

4. Quantifying Compensation. Congress should not accept the State Department report's misleading inflation of U.S. Government assistance to communities affected by the U.S. Nuclear Weapons Testing Program. A great proportion of the expenditures noted by the State Department did not benefit the communities affected by the U.S. Nuclear Weapons Testing Program, but instead provided funding for the U.S. Government to conduct research into the effects of radiation on human beings and the environment. A significant portion of the amounts cited in the staff report were for public works projects and program activities of the U.S. Government for its own purposes and interest, and did not compensate individuals for injuries and loss of property. Historically, Congress has had to intervene to ensure that seizure of private property and injury or loss of life is fairly compensated, and that is precisely why Congress reserved the right for the RMI to seek further compensation, and for itself the authority and responsibility to determine if compensation provided to date is adequate.

5. Equity. Congress should question and critically evaluate the provocative suggestion that the RMI Government and the communities most affected by the U.S. Nuclear Weapons Testing Program have received excessive amounts of money. In fact, the RMI has received only a fraction of the amount the U.S. Government has spent on areas in the United States exposed to radiation during the Cold War (Map II – comparison of US and RMI exposed areas).

6. Just Compensation. The U.S. government took private property belonging to Marshallese families for nuclear testing purposes. When private property is taken by the government, the landowners are entitled to just and adequate compensation. The U.S. recognized this constitutional requirement in Section 177 of the Compact in which it accepted responsibility for the just compensation owing for loss or damage to property resulting from its nuclear testing program. Although the State Department's staff report fails to recognize the just compensation obligation of the U.S. Government, the U.S. courts did not. The U.S. courts held that the U.S. not only accepted the obligation to provide just compensation but that such obligation was a constitutional requirement. The U.S. courts noted that the U.S. agreed that the Marshall Islands Nuclear Claims Tribunal was to determine whether the $150 million provided by the U.S. pursuant to the Section 177 Agreement was just and adequate compensation. The Marshall Islands

Nuclear Claims Tribunal, using well-established U.S. legal principles, determined that just compensation to the affected landowners was significantly in excess of the $150 million provided pursuant to the 177 Agreement. The Congress, through the Changed Circumstances Petition process, has an opportunity to fulfill the obligation of the U.S. government by providing just and adequate compensation to the landowners (the Marshallese families) for the damages and loss of use suffered by them.

The funding of private property awards would permit the affected Marshallese to rid their land of radiological contamination, rehabilitate the soil, revegetate the land, resettle their home islands, and provide the means to establish a local economy in the fishing and tourism sectors. Thus, the funding would provide the resources which would permit them to once again become self-reliant.

7. Compact Negotiations. We object to the assertion that the RMI Government should have included radiation-related damages and injuries as part of its Compact negotiations with the United States. During the negotiations for the first Compact from 1978 through 1985 much of the information about damages and injuries was unknown, the knowledge of which today represents a changed circumstance. Furthermore, it is disingenuous to assert that the RMI should have sought funding for some of its CCP requests as part of the recently concluded Compact renewal discussions. During those discussions, the State Department made it clear to the RMI that nuclear and CCP issues would not be part of the Compact renewal negotiations because they were to be handled separately by Congress. Now, the Department of State is claiming that these matters should have been included in the original discussions. My government looks forward to the opportunity to provide Congress with the written record of State Department policy regarding these issues.

8. Full settlement. Perhaps the most misleading representation of all in the departmental staff report is the thematic suggestion that the nuclear claims settlement was a full settlement, and that this means no further compensation should be considered. Congress approved the full settlement under terms that expressly and explicitly included the right of claimants to seek further compensation through the "Changed Circumstances" process. Thus, Congress kept open both political and legal avenues for further redress of grievances and just compensation. Not only does the departmental staff report fail to faithfully reflect these principles of the settlement, the report fails to inform Congress that the U.S. federal courts that dismissed pending court cases involving these claims expressly left the door open to further proceedings in the event that compensation under the settlement proved inadequate by U.S. standards of justice. This omission and others require a more thorough analysis of the CCP and awards of the Tribunal in order for Congress to determine what additional measures may be necessary to fulfill the terms of the settlement of nuclear claims approved by Congress in 1986 under U.S. Public law 99-239.

Since the U.S. Nuclear Weapons Testing Program was conducted at a time when the U.S. governed the Marshall Islands and its people with the same authorities extended to the United States itself, we believe the same standards of care, safety, redress of grievances and justice that Congress has adopted with respect to the effects of nuclear testing in the U.S. mainland should be honored for the Marshallese people. In particular, we believe there should be equity in terms of healthcare availability and standards, environmental clean-up, radiation protection standards for the public, and compensation.

Without question, the cost of addressing radiological damages and injuries is expensive. The price tag for the requests made by the RMI government is high, but they are based on the level of care, protection and compensation that U.S. citizens receive for similar circumstances. Put another way, there was nuclear weapons testing in the United States and there was nuclear weapons testing in the Marshall Islands, but there is great disparity between remediation measures for Marshallese citizens compared to U.S. citizens. The RMI is not asking for special treatment or to make its people wealthy with compensation money, it is only asking for fairness. The U.S. government conducted its nuclear weapons testing program in the

Marshall Islands because it recognized the hazards of these activities for its own citizens and ecosystems. It seems only fair that the Marshall Islands receive equity in terms of U.S. response.

All people who were exposed levels of radiation above the current U.S. standard for public safety, 15 mrem, or whose health is adversely affected by the nuclear weapon tests should be granted access to the best available U.S. standard of primary, secondary, and tertiary health care services, including specialty care for radiogenic illness and medical monitoring. This model is consistent with a program mandate from the US Congress in 1980 [P.L. 96-205, Sec 106 (a)], which specified "…a program of medical care and treatment… for any injury, illness, or condition which may be the result directly or indirectly of such nuclear weapons testing program."

To put the assistance provided to the RMI in contrast to that provided to American citizens, consider that the entire amount of the 177 Agreement, $150 million for all past, present, and future damages and injuries related to the testing program, is the same amount of money made available to the State of Pennsylvania for public education after the Three-Mile Island incident – an incident resulting in no known loss of life or future health risks to the adjacent community.

a. Equity in healthcare

Downwinders and DOE workers exposed to radiation in the United States receive a high standard of healthcare for their radiation exposure – a level that greatly surpasses the healthcare available to Marshallese citizens exposed to radiation. The United States government has taken responsibility for the deleterious health consequences of the U.S. Nuclear Weapons Testing Program in the Marshall Islands in the 177 Agreement. However, the impact of the testing program on the health and well-being of the Marshallese people far exceeds the present capacity and provisions of the Compact. Current programs, which are designed to care for radiogenic illnesses and the health consequences of nuclear weapons testing, are limited in scope and resources. The 177 Agreement envisioned adequate health care for patients exposed to radiation. The gross inadequacy of current programs to address the adverse health consequences of the U.S. nuclear weapons testing program represents a changed circumstance.

Medical care is part of the comprehensive package owed to the people of the RMI as part of their nuclear compensation. The higher costs associated with health care, medical surveillance, and radiological monitoring of Marshallese citizens affected by the U.S. Nuclear Weapons Testing Program could not reasonably have been identified at the time of the 177 Agreement and constitutes a changed circumstance. Future planning and funding must develop and sustain the RMI healthcare system's efforts to deliver comprehensive and culturally tailored health care services to the affected populations, as envisioned in the Preamble of the 177 Agreement.

The 177 HCP program has always been grossly under-funded and unable to deliver an appropriate level of health care as anticipated in the Compact. Provision of tertiary care services (off island health care that cannot be provided in the RMI) has not been available for 7 to 10 months out of each year. Secondary health care (inpatient and hospital-based healthcare) has been delegated to the RMI hospital system, which is not equipped to provide the appropriate level of inpatient care for the 177 population. Hence, the individuals in the 177 HCP have been subjected to a substandard level of primary, secondary and tertiary healthcare services since the program's inception. With less than $12 per patient per month, this is the only healthcare available to Tribunal awardees with radiological illnesses and the vast majority of the 4 atoll population.

If done properly, cancer care, in particular, is very expensive to manage as it requires specialized doctors, screening and registries, pain control management, diagnosis and an array of treatments such as chemotherapy, surgery, radiation therapy and immunology. Cancer cases are often diagnosed at very late stages in the RMI because of a lack of basic screening and treatment elements. The RMI has no cancer

registry, no oncologist, no capacity for specialized oncological surgery, no chemotherapy, no pathologist until last year, and no regular funds for cancer referral. In short, no health infrastructure has ever been built to address cancer, thyroid, or other radiation-related illnesses in the Marshall Islands.

The obligation to provide medical care for the adverse consequences of the U.S. Nuclear Weapons Testing Program cannot be met without comprehensive medical monitoring of populations previously exposed to ionizing radiation. A lack of medical monitoring has precluded the opportunity for early diagnosis and treatment of cancer and other radiogenic illnesses. Failure to detect and treat cancers and other radiogenic illnesses in their early stages results in more pain and suffering for the patient, and a larger cost of care for the healthcare institutions.

This is particularly important for us to consider given the 2004 report by the National Cancer Institute predicting that more than half of the cancers resulting from the U.S. Nuclear Weapons Testing Program have yet to develop or be diagnosed, including 40% of our thyroid cancers resulting from radiation exposure. The hundreds of people still expected to contract cancer exceed the populations of the 4 atolls defined by Congress as the area exposed to radiation and hence eligible for U.S. government assistance. This constitutes a changed circumstance.

I also want to note that some people suggest that the future cancer burdens do not justify further U.S. action as the Tribunal has already made personal injury awards outside the 4 atolls and to a higher number than the anticipated future burden. My response to this is that the presumptive formula used by the Tribunal is based on similar types of compensatory programs created by Congress. More importantly, the RMI is concerned about the healthcare needs of these people. The Tribunal provides a portion of awards for some cancers; my hope is to improve the RMI's medical surveillance capacity so we can provide early diagnosis and better care to these future cancer patients.

b. Equity in clean-up

While communities downwind from the Nevada test site and DOE workers provide a comparison for personal injury disparities between the U.S. and the RMI, clean-up activities at Hanford, Washington provide a similar comparison for restoration of contaminated lands in the U.S. and the RMI. Again, for comparative purposes, 8,500 times more radioactive iodine was released in the RMI than at Hanford.

In response to the environmental contamination caused by Hanford, the U.S. government appropriates $2 billion and employs approximately 11,000 workers annually to assist with the clean-up. From the FY05 budget, the Department of Energy is estimating a total life cycle cost of $56 billion and a completion date in 2035. Due to the manifest inadequacy of Tribunal funding, the Tribunal does not have the means to fund the private property damage awards it has made. To date, the Tribunal has paid approximately $4 million to Enewetak and Bikini for their property damage awards totaling $1.1 billion ($454 million and $629 million respectively), or just over 50% of an annual clean-up appropriation to Hanford. Again, the RMI government believes that Marshallese citizens have a right to the same clean-up standard as the U.S. maintains for its own citizens. The goal for clean-up at Hanford is 15 mrem, yet the U.S. government maintains that the RMI should settle for the less rigorous international or outdated standard, despite the fact that Marshallese citizens were wards of the U.S. government when their exposure to radiation occurred.

c. Equity in radiation protection standards

The RMI government requests the same level of radiation protection the U.S. EPA currently applies, and particularly its focus on protecting the maximum exposed person since this approach ensures the protection of everyone. The protection to the Marshallese who live on their land and are dependent on its resources is no less important than the protection of the U.S. public who may reside near Yucca

Mountain, for example. Each group is entitled to the same level of protection which means the application of the same 15 mrem per year safety standard.

d. Equity in compensation

For purposes of comparison, the disparities between the personal injury programs for the RMI and Downwinders in the U.S. are clear. The total weapons yield for the RMI was 108,496 kilotons, approximately 100 times greater than the 1,096 kilotons detonated in Nevada. The Tribunal has made awards for $87 million dollars in personal injuries with a shortfall of $15.5 million due to an inadequacy of funds. In comparison, Downwinders have received $366 million for personal injury awards as part of the Radiation Exposure Compensation Act (RECA) and Congress has made supplemental appropriations when additional funds were needed. RECA requires the Attorney General to ensure that a claim is paid within 6 weeks of approval. In the RMI, 45% of claimants have died without receiving their full claims because of the pro-rationing requirement.

The geographic area defined by Congress as exposed to radiation from the Nevada tests and eligible to participate in the Downwinders program is significantly larger than the area Congress recognizes as exposed in the Marshall Islands. Although the total yields in Nevada were 1/100th the yields of the Marshall Islands, the exposed area in the Marshall Islands is limited to just 4 atolls. A map that superimposes the entire Marshall Islands over the U.S. Downwinders affected area underscores the discrepancies in geographic areas considered exposed (Map II). In April 2005, the National Academy of Science (NAS) recommended expanding eligibility for the Downwinders beyond its current geographic boundaries, and called on Congress to move quickly to provide assistance to Downwinders suffering from radiogenic conditions. In addition to ensuring that the measures taken under Section 177 of the Compact be sustained to guarantee that RMI citizens receive the same level of justice as U.S. citizens affected by the mainland tests, if the criteria for defining the universe of affected people and lands in the U.S. changes, the same criteria should be applied in the RMI.

Conclusion

In conclusion, Chairmen, Members, Ladies and Gentlemen, we are sitting here talking about numbers, policies, and science, yet for all of us in the Marshall Islands, the U.S. Nuclear Weapons Testing Program is a profoundly human experience – we experience the broad-reaching effects of the testing program on the most intimate and personal levels: from our home islands that we can no longer inhabit, to the sickness and death of our friends and family.

Again, to put this into human terms, the National Cancer Institute estimates hundreds of cancers related to the U.S. Nuclear Weapons Testing Program have yet to appear. This means that hundreds more of the people who we talk to, sleep next to, eat with, love, and work with will endure tremendous physical hardships and possible death. We can do our best to prepare our health system to deal with this burden, but we can never remedy the human and emotional toll that this takes on us as individuals, families, communities and a nation. A member of my staff recently received an email from a member of the Rongelap community expressing these sentiments:

> *The very first time I heard about a person dying of cancer was a friend of mine who was born on Wotje and grew up on Ebeye named Mrs. Darlene Keju-Johnson. Ever since then, so many people whom I loved and knew died of cancer.*
>
> *Last November, I went to Ebeye on Kwajalein Atoll for a Rongelap funeral. One of the deceased was my brother-in-law, a member of the control group, but when I got to the burial I saw that there were many, many people and another coffin. The other one was a young girl who grew up on Ebeye and was ready to graduate from 12th grade. She died of cancer of the brain. Man, I just cried!*

In December, I went back to the same burial place on Ebeye, two people have died, one was my aunt who was a DOE control subject and one was a Bravo survivor who died of cancer and God knows what else for we will never know because we don't have the facility, equipment, doctors or medicine.

August before, my uncle, a Bravo survivor, died of numerous cancers as well as his wife. Most of their children were affected by radiation; the eldest son was the first one to go at 18 years of age and the living ones are just struggling to hold on, and the grandchildren are sick, too. My aunt died of breast cancer and my uncle died of lung cancer and my father died of cancer.

Today as we speak, a niece of mine is in intensive care diagnosed with cancer who won't be alive for long as I was informed and the list go on and on.

It has been over 50 years since history linked our two great nations. We have stood together in times of peace and times of conflict. At the conclusion of World War II, President Truman told the U.S. people that America was now "the most powerful nation in the world – the most powerful nation, perhaps, in all history." He went on to say that "a society of self-governing men is more powerful, more enduring, more creative than any kind of society, however disciplined, however centralized." We look to Congress to tap into the creative talents of your great nation to help us address the lingering needs of your friends and allies who, as this Committee's own resolution notes:

> Whereas the Bravo test and the 12 year nuclear testing program has been the defining experience of the modern era for the people of the Marshall Islands, and these momentous events created a common bond between the people of the Marshall Islands and the United States military and civilian personnel who shared hardships and suffering with the people of the Marshall Islands during the testing program, as well as the United States citizens in areas affected by the mainland testing programs and weapons production industry (H. Con. Res. 364).

Kommol tata