



Attendees observe a moment of silence to remember those who lost their lives in the service as well as the events of September 11, 2001, during the World Fire Congress in Washington D.C. Picture: NFA

NFA CEO RETURNS FROM INAUGURAL WORLD FIRE CONGRESS

National Fire Authority (NFA) Chief Executive Officer Puamau Sowane has returned from Washington D.C, U.S.A, after attending the inaugural World Fire Congress (WFC), which involved 58 fire and emergency service organisations worldwide. Mr. Sowane was accompanied by Mr. Esala Radio, the NFA Manager International Affairs & Legal Counsel.

The World Fire Congress was organised by the United States Fire Administration (USFA), a component of the Federal Emergency Management Agency (FEMA) and the U.S. Department of Homeland Security.

Mr. Sowane said that he was honoured to be the sole representative of all Pacific Islands fire and emergency services organisation, apart from New Zealand and Australia, to attend the inaugural World Fire Congress. He is happy to share his knowledge with Pacific Island Countries who can also benefit from it. He looked forward to the next Pacific Islands Fire and Emergency Service Alliance (PIFESA) next year to share his learning outcomes from the World Fire Congress.

HOW NFA WAS INVITED

Mr Sowane said that he was thankful to the Pacific Islands Emergency

Management Alliance (PIEMA) for its continuous support to the National Fire Authority of Fiji (NFAF). PIEMA over the years had been sponsoring NFA delegates to attend the annual Australasian Fire and Emergency Service Authorities Council conference (AFAC). It is the peak body responsible for representing fire, emergency services and land management agencies in the Australasian region. It is Australia's largest and most comprehensive emergency management conference and exhibition.

In August 2023, he attended the AFAC23 and met the National President of the Institute of Fire



From left, NFA's Manager International Affairs & Legal Counsel, Esala Radio and NFA CEO Puamau Sowane with a copy of the signed Statement of Founding Principles and Objectives in Washington D.C.
Picture: NFA

Engineer Australian Branch Mr. Ryan Cleggett. Through this meeting, Mr. Sowane engaged in collaboration with Mr. Cleggett and shared his interest on opportunities of establishing an Institute of Fire Engineers (IFE) Fiji Branch. His interest to set up an IFE Fiji Branch stemmed from the new challenges slowly surfacing in Fiji, the introduction of taller buildings that have exceeded the NFA firefighting capability of 8th level or 25 metres. Any building that exceeds 25 metres will require a Fire Engineer's expertise to design adequate Fire Safety suppression methodologies in compliance with fire safety aspects under the National Building Code of Fiji.

Through this working relationship Mr Cleggett introduced Mr. Sowane to Ms. Lamar Gonzalez

Wedlock, the Director International Affairs for the U.S. Fire Administration (USFA). After a series of Zoom meetings, Ms. Lamar introduced Mr. Sowane to the U.S. Fire Administrator Dr. Lori Moore-Merrell, who was appointed by U.S President Joe Biden. During his discussions with Dr Lori Moore-Merrell, Mr. Sowane highlighted the NFA firefighters current, and future challenges.

"This led to an invitation for NFA to attend the inaugural World Fire Congress and through partnership with U.S Fire Administration the World Bank fully sponsored our participation at the inaugural Congress," he said.

Mr Sowane said this historic event established a global fire service leadership network dedicated to supporting and strengthening fire and

emergency service organisations around the world.

The NFA CEO joined the heads of other fire and emergency services worldwide in signing the Statement of Founding Principles and Objectives, a necessary first step before the establishment of a World Fire Charter, setting the path for biennial meetings with a different host nation.

Mr Sowane said during the two days congress, Fire and Emergency Service Heads discussed four major areas affecting fire services and firefighters worldwide.

Structure Fire and Firefighter Response

Globally, fire threatens critical infrastructure, national security, and public safety. Structure fires are a leading cause of civilian fire deaths and injuries, and most fires are preventable.

Climate Change Impacts

Globally, climate change-driven wildfires are growing in intensity, size and destructiveness. The effects on communities can be catastrophic including overwhelmed firefighter response capabilities, tragic loss of life and socioeconomic devastation.



NFA CEO Puamau Sowane signs the Statement of Founding Principles and Objectives, a necessary first step before the establishment of a World Fire Charter in Washington D.C. Picture: NFA

Fire Risk of Emerging Technology

Beneficial innovations such as electric vehicles (EV) and lithium-ion battery bikes and scooters aim to end the global dependence on fossil fuels. While lithium-ion battery-powered products like scooters and electric bikes, electric vehicles, large energy storage facilities are all making life easier, fun, and green, these can lead to unintended consequences such as a fire threat. These beneficial products come with a threat when not used as directed or intended.

Firefighter Health and Safety

Globally, firefighters have a 9% higher risk of developing cancer and a

14% higher risk of dying from cancer compared to the general public. Firefighters and other rescue personnel develop PTSD at a similar rate to military service members returning from combat. To reduce these risks, the Congress heard that global firefighting community must adopt behavioural and operational changes, including proper protection, standard operating procedures for decontamination and reduction in overall exposure.

NFA CONTRIBUTION

Mr. Sowane said that every year around the world, tens of thousands of individuals are seriously injured or killed by fires, and nations experience billions of dollars in direct

and indirect economic loss and Fiji is not isolated from this global problem.

Globally, fire threatens critical infrastructure, national security, and public safety. Structure fires are a leading cause of civilian fire deaths and injuries, and most fires are preventable. It was a great takeaway to listen to the experts and hear them describing the physics of fire dynamics, the influence of responding firefighters to stop the fire, the importance of fire-resistant construction materials and the value of implementing building codes.

Mr. Sowane said, NFA has contributed a lot in the revised National Building Code after proper analysis done on the main causes of fires in Fiji. Electrical fire causes remain the major causes of commercial, industrial and residential fires in Fiji and it stood out like a sore thumb that was hard to heal because we have been using band-aid solutions in the past and present. The solution is in the revised National Building Code that is to be presented to Cabinet. Unless we fix these issues, we will continue to face the same problem year in year out with the lives of our people at stake.

Making his contribution to the Congress, Mr Sowane said one of the challenges that faced by the Fiji Fire and

Emergency Services is how to deal with changing human behaviour towards fire safety. It posed significant challenges to firefighting efforts. Simultaneously, urbanization has critically become unabated in Fiji, further increasing the potential impact of building fires on occupants. Understanding human behaviour during fire assumes an ever more pressing issue.

Fires pose significant risks to human lives and infrastructure and the human response plays a great role in mitigating such risks. Understanding how individuals respond to fires, make decisions during emergencies, and navigate evacuation processes is pivotal for formulating effective safety measures and devising comprehensive evacuation strategies. The multidimensional nature of human behaviour during fires requires attention to various factors, such as psychological responses, cultural influences, cognitive processes, and societal dynamics. People's behaviour during a fire is influenced by factors like mental and physiological stress, familiarity with escape routes, perception of risks and their experiences. Additionally, cultural norms, age and functional limitations can significantly affect

evacuation decisions that can lead to critical outcomes.

Referring to Fire Risk on emerging technologies he said Fiji Government's initiative towards sustainability and the reduction of carbon emissions has resulted in the introduction of electric vehicles in Fiji, with the Tourism sector looking at overhauling its fleet to just have EV vehicles.



From left, NFA's Manager International Affairs & Legal Counsel, Esala Radio, US Fire Administrator Dr Lorrie Moore-Merrell and NFA CEO Puamau Sowane in Maryland, Virginia. Picture: NFA

“The challenge for Fiji's fire service now is to have the proper training required in terms of lithium-ion battery fires. Fiji's fire service currently does not have the technical expertise to deal with lithium battery fires and its proper disposal and PPE,” he said.

“The electrical vehicle space is unregulated in Fiji. The only laws regarding EVs are in relation to subsidies to encourage increased purchasing of EV vehicles. We understand that Singapore has laws on the use of lithium batteries and we would like to

collaborate with them in terms of this new technology and how to regulate it.

“There is a significant need for further awareness and building capacity in relation to regulatory laws and standards, firefighting training and other aspects of EV vehicles and the hazards and risks involved.

“Collaboration between nations is indeed imperative.

He also urged the Communities of Practice to compile minimum generic international standards to assist us in regulating the electrical vehicle space.”

On the topic of Firefighter Health and Safety, Mr Sowane said, “Fiji is experiencing 1 firefighter death per year, every year there is a firefighter dying from either heart attack, asthma or bone cancer. Majority, however, are dying of heart failure. Most of these firefighters have served in the fire service for more than 20 to 30 years. “Some firefighters, due to their exposure during fire

incidents and road rescues, cannot eat smoked meat and minced meat, owing to the trauma faced during their operations. Even though we provide professional counselling after every traumatic accident, there is still a psychological impact that remains with them for life.

“The truth is sometimes we do not have the financial capacity to provide proper PPE to our firefighters and small countries like Fiji need the assistance of well-developed countries through proper training and provision of equipment to ensure the wellbeing and safety of firefighters.”

KEY TAKEAWAYS

Mr Sowane said at the end of the inaugural World Fire Congress, Fiji fully supported the objective of the World Fire Congress and signed the Charter in support of its principles. “The importance of having such a Congress is that we can hear and share ideas of fire services across the globe. We now know that we are not alone in confronting most of the problems we face.

“Collaboration is important when looking for solutions. The Congress has given us a global platform to network with other fire services in terms of capacity building, training and mapping the way forward for Fiji’s fire service.

“Major fire incidents, fatalities, property loss, firefighter health and safety are generic global issues that require global solutions, and such solutions can only be achieved through global collaboration, we cannot solve them alone in Fiji.

“The trend of having firefighters dying early through bone cancer, heart attack, asthma and so forth actually came about because we could not provide the right equipment, the right training and proper incident management in relation to decisions made during emergencies. It is important to revisit the Sendai Framework for Disaster Risk Reduction 2015-2030.

“What happens in one part of the world has a ripple effect on other parts of the world. Fiji is a small country but can be a contributor to carbon emissions if we don’t change the way we look at things. The importance of setting standards, particularly in the introduction of new technologies such as lithium batteries. There has to be an international standard on how to deal with its fire risks and hazards.

“It is important to provide firefighters with the correct skill, correct knowledge based on information from trusted sources. Firefighters should be

equipped with the correct knowledge and experience in terms of fire dynamics. Due to lack of proper knowledge and skills, 80 per cent of firefighters are injured through human error, how decisions were made during incident management contributed to the injuries.”

Mr Sowane further added the Congress had established a platform for global fire service collaboration which NFA would benefit from.

“We cannot stand alone, if we are to protect our people and their properties from fires and more importantly the lives of our firefighters who are exposed to life threatening risks associated in attending burning structures that expires toxic fumes that is harmful to human when inhaled. We cannot over emphasize the need to collaborate with other developed countries and learn and benefit from their experiences and well-resourced fire and emergency organisations.”

Mr Sowane said after the inaugural WFC, and listening to international experts the work towards overcoming challenges confronting these issues was just beginning. “We are just looking at the tip of the iceberg. There is still much to do,” he said.