

# A Port in the Storm: Clearfield's Modular Solutions Accelerate Hurricane Restoration

CCT and BVI TV rebuilt a Caribbean island's entire fiber network with pre-connectorized technologies — cutting deployment times by 50%



*“Considering the restoration advantages alone, Clearfield’s technologies are perfect for the Caribbean. I don’t see why every operator in our corner of the world is not using these solutions.”*

*— Kyle Dasent, Chief Technical Officer at Caribbean Cellular Telephone Ltd.*

## Background

The British Virgin Islands may be a slice of paradise, but they are not immune to the Caribbean’s bane: hurricane season. Storms appear from nowhere, posing risks to safety and property — and to communications infrastructure, as the team at Caribbean Cellular Telephone Ltd. (CCT) knows well.

After the British Virgin Islands weathered two devastating Category 5 storms in 2017, CCT needed fiber solutions that would help restore service faster and support more resilient operations in the future. Today, CCT serves roughly one-third of homes and numerous businesses across the territory with fiber broadband, all on a network built on Clearfield® technology.

Getting to this point required a new approach to deployment, with zero splicing beyond the fiber cabinet. The solution offered an ease of deployment, resilience, and reparability that ultimately surprised CCT’s team with its speed to deploy and maintain.

## Challenges

When the storms tore through the BVI, they effectively demolished CCT's newly acquired cable network, which is now known as BVI Cable TV. But this disaster created an opportunity to rebuild with fiber from the ground up. However, a competing outside plant vendor's inability to deliver equipment on time — a problem that predated COVID-19 and worsened during the pandemic — left the project stalled.

“Lead times went from three months to six months, then nine months,” says Kyle Dasent, Chief Technical Officer at CCT. “When the COVID-19 pandemic happened, the factories shut down entirely. So, we knew we needed to take a different route.”

CCT also needed a solution built for the Caribbean's harsh conditions: heavy rainfall, recurring hurricane threats, and a terrain where re-splicing and replacing infrastructure is slow and costly. Also, the limited labor pool of skilled fiber splicers on the islands meant that reducing the number of splices in the network would offer a crucial advantage. These demands led CCT to Clearfield.

## Solution

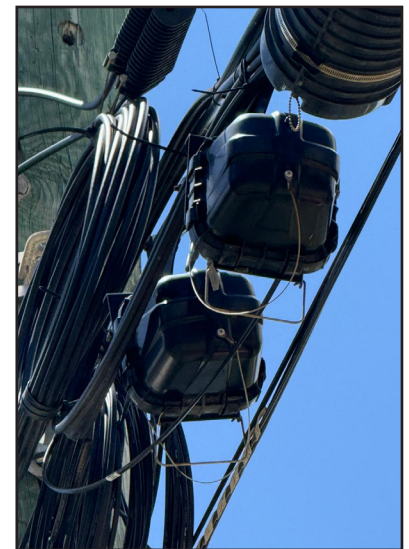
Prior to an upcoming storm season, Dasent encountered Clearfield at an industry conference and was drawn to the company's modular approach to terminals, cassettes, and cabinets. He worked with Clearfield's sales and application engineering experts to design a full outside plant solution in a matter of weeks.

The network CCT built relies on Clearfield's FieldSmart® Fiber Distribution Hub (FDH) cabinets, Clearview® Blue Cassettes, and a range of FieldShield® fiber optic cables and microduct solutions. However, the key technology for the application was the YOURx-Terminal, a pre-connectorized modular solution that supports strand-mount applications.

Using two custom-configured versions of the YOURx-Terminal, CCT can run MPO cables from the head end to pole-mounted terminals and SC-connectorized drop cables, completing each subscriber connection. To handle the BVI's branching road topology, Clearfield engineers collaborated with Dasent to design a custom branching YOURx-Terminal with three MPO ports, allowing CCT to preconfigure how fibers split at road intersections — no field splicing required.

Clearfield quickly delivered the first phase of equipment. When it arrived, Clearfield also sent training experts to the BVI to work hands-on with CCT's field crews, demonstrating proper MPO installation, connector cleaning, and drip loop technique.

“Clearfield made sure that my success was their success,” Dasent says. “I felt like I was part of the team.”



***CCT used two custom-configured YOURx-Terminals from Clearfield with pluggable MPO and SC connectors to streamline deployment.***

## Results

Using Clearfield solutions, the CCT team realized several key benefits: faster deployment times with practically zero splicing, ability to repair network infrastructure rather than replace it, and streamlined storm recovery. In addition, standard fiber techs could handle most installs and repairs without needing to be highly experienced splicers.

The 100% plug-and-play network transformed how CCT's crews work in the field. One team strings MPO cables pole to pole while another mounts and connects terminals, with a single power test at the first terminal confirming light levels across the entire run. Deployment runs roughly twice as fast as CCT's previous approach — and once the last terminal is up, the area is ready for service the next day.

“When we finished the first area with the Clearfield setup, our entire team was sold on the technologies,” Dasent says. “By the second build, we had full confidence in how the products were installed and operated.”

When a technician installed the wrong terminal mid-run, for example, CCT crews could simply swap the internal components on the spot rather than unlashing and replacing the entire unit. The same advantage applies if the phone pole is damaged. The YOURx-Terminal will typically survive the impact, and crews can remount the same hardware on a replacement pole.

“Nine out of ten times, the terminals are indestructible,” Dasent says. “We test the MPO cables, and if they're fine, we put the same equipment back up on the new pole. Everything is good to go.”

Legacy sealed terminals often allowed moisture ingress and, as a result, would require full unit replacement. With Clearfield's modular terminals, crews quickly restore the internal cartridge without requiring a warehouse trip or reorder.

“You don't have to call the warehouse to send another terminal or branch unit,” Dasent says. “You clean everything up, pop it back, and everything works the way it did the first time.”

For an operator in a hurricane belt, repairability is a meaningful competitive edge. Rival operators in the BVI still rely on mechanical and fusion splicing, according to Dasent. This requires significantly more time and specialized labor, both of which are in short supply, after every major weather event. By eliminating fiber splicing, CCT restores service to customers exponentially faster when storms hit.

“Considering the restoration advantages alone, Clearfield's technologies are perfect for the Caribbean,” Dasent says. “I don't see why every operator in our corner of the world is not using these solutions.”



**Clearfield FieldSmart® Fiber Distribution Hub (FDH) cabinets equipped with Clearview® Blue Cassettes support CCT's network needs.**

## **About CCT**

*Caribbean Cellular Telephone Ltd (CCT) was founded in 1986 as CCT Boatphone and later rebranded to CCT Global Communications in 2002 after expanding to second-generation mobile telecommunications (GSM). The company became 100% locally owned on April 21, 2013, making CCT the only solely locally owned major telecommunications company in the British Virgin Islands. CCT acquired the local cable company (BVI Cable TV) in 2017 to complement their mobile offerings with fiber wireline services. Today, CCT BVI is committed to being a different type of fiber and wireless network that is built like none other. For more information, visit [www.CCTBVI.com](http://www.CCTBVI.com).*

## **About Clearfield, Inc.**

*Clearfield, Inc. (NASDAQ: CLFD) designs, manufactures and distributes fiber optic management, protection and delivery products for communications networks. Our “fiber to anywhere” platform serves the unique requirements of leading incumbent local exchange carriers (traditional carriers), competitive local exchange carriers (alternative carriers), and MSO/cable TV companies, while also catering to the broadband needs of the utility/municipality, enterprise, data center and military markets. Headquartered in Minneapolis, MN, Clearfield deploys more than a million fiber ports each year. For more information, visit [www.SeeClearfield.com](http://www.SeeClearfield.com) or [@ClearfieldFiber](https://twitter.com/ClearfieldFiber).*