



CASE STUDY

Royal Netherlands Navy Training Vessel Adopts FleetBroadband from Stratos

MOV Van Kinsbergen is a training vessel of the Royal Netherlands Navy, a long-standing Stratos customer. The ship recently completed a field trial and full evaluation of FleetBroadband. As a result, the Van Kinsbergen adopted the service to enhance crew safety and welfare, improve the efficiency of daily operations, and provide a better infrastructure for the education of midshipman at sea.

Drivers for Better Communications

In 2008, The Royal Netherlands Navy (RNLN) successfully completed the first in an extensive series of FleetBroadband field trials that have been conducted by Stratos. After a thorough evaluation, the RNLN decided to purchase the service from Stratos to manage daily operations onboard the MOV Van Kinsbergen while at sea.

The ship, which trains midshipmen in navigation and seamanship, operates with two separate crews—a military crew, and a civilian crew. Normally at sea it carries five crewmembers, two instructors and eight students. The three-month trial was conducted in a variety of deep-water

conditions throughout Western European waters, including the Baltic Sea. Prior to implementing FleetBroadband, the vessel's communications included Inmarsat-C and a mobile phone for voice, fax, e-mail and Web browsing.

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—Lieutenant Stefjan Veenstra, commanding officer, MOV Van Kinsbergen

"Previously, service via mobile phone was done with a 54K modem," says Lieutenant Stefjan Veenstra, commanding officer of the Van Kinsbergen. "E-mail and Web browsing were too slow and unreliable, while the amount of information increased every year. Weather predictions by fax provided limited information. Outside coastal coverage, we had no normal voice, fax, Web or e-mail service for periods of three weeks or more. But our operating area has expanded. Crew welfare, safety, efficiency and the need for a better infrastructure for education and instruction were the main drivers that justified a new satellite communication system."



Communications centre on the bridge, FleetBroadband handset (circled).



Thrane & Thrane SAILOR 500 FleetBroadband antenna (circled).

Implementing FleetBroadband

FleetBroadband from Stratos provides an always-on IP connection at speeds up to 432 kbps. For the first time, users can make voice calls while maintaining one or more data connections.

"One difference between FleetBroadband and other high-speed connectivity, such as VSAT and Inmarsat Fleet, is the very small terminal, which makes it easy to install," explains Michiel Meijer, Maritime Marketing Manager for Stratos. "Unlike dial-up services, which charge by the minute, FleetBroadband charges by the megabyte. That means you pay only for what you use. For a government vessel like the Van Kinsbergen, FleetBroadband is a very cost-effective solution."

Through its local office in the Netherlands, Stratos provided airtime and technical support to the RNLN. Radio Holland installed a Thrane & Thrane SAILOR 500 FleetBroadband terminal on the Van Kinsbergen. Installing the antenna and below-deck unit and connecting to a single laptop took just two hours. According to Lt. Veenstra, making the first Internet connection took less than five minutes. "FleetBroadband installation is fairly easy—plug and play," he notes. "This is important because seafarers are not computer experts."

During the field trial, the Van Kinsbergen tested a variety of applications normally used onshore including Web browsing, instant messaging, video chat, digital faxing and weather forecasting. Also, the ship

successfully made voice calls while maintaining simultaneous data connections. FleetBroadband was integrated with AmosConnect from Stratos, to manage the vessel's e-mail traffic. Stratos Trench, one of many value-added services from Stratos, was used as the local firewall. Digital eFax software was provided by j2 Communications, and SPOS weather forecasting software by Meteo Consult.

Achieving Valuable Results

One way the RNLN evaluated FleetBroadband was by comparing performance at sea with what they would normally expect from a broadband connection onshore. "That's where reality sets in," observes Lt. Veenstra. "The connection in most homes and offices nowadays is much faster." Nevertheless, the Van Kinsbergen rated voice quality, e-mail with AmosConnect, and digital faxing with a 5 on a scale from 1 to 5 (5 being "very good"). Instant Messaging with MSN and Web browsing on data-light Web sites both earned a 4.



Naval Jack of The Netherlands.
Image credit: Wikipedia

"Because we didn't have a satcom system like Fleet 33 or Fleet 77," he adds, "FleetBroadband took us a couple steps forward all at once. We now have a much faster connection than ever before. With that broadband connection," he explains, "the Van Kinsbergen today can maintain contact with home, office, and port authorities via voice, e-mail, fax and Web anywhere at sea."

What does Lt. Veenstra consider the single most valuable benefit of FleetBroadband from Stratos compared with the vessel's previous communications? "Connectivity at all times," he says, without hesitation. "The Van Kinsbergen is a training vessel. To ensure maximum educational value—in terms of curriculum and other information for students—connectivity with the home

office, the Royal Netherlands Defence Academy, is increasingly important. Due to our expanded operating area, always being connected improves safety and efficiency in daily operations. For example, FleetBroadband provides much better performance in routing and planning related to weather."

"Finally, FleetBroadband enhances crew welfare," says Lt. Veenstra. "Times are changing. People have become more dependent on Internet connectivity. The possibility of staying in touch with home at any time while at sea helps motivate crew and leads to better performance."

About the Royal Netherlands Navy

The mission of the MOV Van Kinsbergen, one of the Royal Netherlands Navy's training vessels, is to educate midshipmen in navigation and seamanship. The main mission of the Royal Netherlands Navy (www.marine.nl) is the defense of Dutch territory and that of its allies, including the territory and waters of the Netherlands Antilles and Aruba. The Royal Netherlands Navy also supports and assists civilian authorities in maintaining law and order, providing disaster relief and humanitarian aid both on a national as well as international scale.

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Van Kinsbergen.*

FleetBroadband Key Benefits

FleetBroadband from Stratos is the first high-speed, mobile data network that offers seamless worldwide coverage in combination with small antenna equipment. Reliable, cost effective broadband maritime communications via the network you know and trust.

FleetBroadband Applications and Features

- Simultaneous voice and IP data
- Standard IP – Speeds up to 432kbps for e-mail, Internet and intranet access via a secure VPN connection
- Worldwide Coverage – Utilizing Inmarsat's I-4 satellite constellation as of February 2009.
- Remote IT maintenance
- Crew communications – including pre-paid Internet
- Internet and company intranet access
- Large file transfer
- Videoconferencing

The Stratos Advantage

FleetBroadband from Stratos also includes industry leading Stratos Value Adds to improve your broadband experience.

Stratos Dashboard™

This online system offers fast provisioning, cost management and credit management. It also provides reporting options, detailed traffic management, billing and troubleshooting information.

Stratos Dashboard is designed to remotely manage FleetBroadband communications. For example, customers can set traffic usage alerts, manage firewall settings, limit credit risk by adjusting credit-control functions and change voicemail options.

Stratos Trench™ (Customer Managed Firewall)

A personal firewall between the Internet and the FleetBroadband network that increases security and saves costs. Authorize or block (Web) traffic and applications via a userfriendly online interface.

AmosConnect™ from Stratos

An easy-to-use, yet highly sophisticated e-mail service that seamlessly integrates all of your e-mail, fax, telex, GSM text, interoffice communications and mobile personnel access into a single messaging system.

AmosConnect Crew from Stratos

An all-in-one communication solution that enhances crew satisfaction and welfare onboard your vessels. The latest version, AmosConnect Crew CommCenter, now includes an Announcement Board for internal corporate bulletins and Daily World News for crewmembers.

Prepaid Internet for Your Crew

Combine Stratos ChatCard™ Data and StratosNet® Accelerator to offer your crew Internet access on a dedicated crew PC without additional costs to the vessel. Internet browsing costs are charged to the crew member's prepaid ChatCard, which also offers prepaid crew voice calls.

StratosNet Accelerator is a free Internet-optimization application that reduces the amount of e-mail, Web and FTP data transmitted to and from FleetBroadband terminals by more than 80 percent, significantly reducing satellite airtime costs.

About Stratos

Stratos is the world's trusted leader for vital communications. With more than a century of service, Stratos offers the most powerful and extensive portfolio of remote communications solutions including mobile and fixed satellite and microwave services.

More than 20,000 customers use Stratos products and industry-leading value-added services to optimize communications performance. Stratos serves U.S. and international government, military, first responder, NGO, oil and gas, industrial, maritime, aeronautical, enterprise, and media users on seven continents and across the world's oceans. For more information visit www.stratosglobal.com.



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