



Marines attached to the 3rd Transportation Support Battalion, 3rd Marine Logistics Group, move a hose reel system during Operation Pacific Reach on April 5, 2017. The bilateral training event exercised an area distribution center, an air terminal supply point, combined joint logistics over-the-shore, and the use of rail, inland waterways, and coastal lift operations to validate the operational reach concept. (Photo by Petty Officer 2nd Class Eric Chan)



Extending Operational Sustainment in Korea

U.S. Forces Korea and the Republic of Korea are using distribution hubs with air terminal supply points and area distribution centers to meet their operational sustainment goals on the peninsula.

■ By Brig. Gen. Michel M. Russell Sr. and Brig. Gen. Jae Pil Jeon

Providing joint operational sustainment in the Korean theater of operations (KTO) to ensure the commander is able to maintain operational options and reach presents challenging and unique opportunities for U.S. Forces Korea (USFK), the United Nations Combined Forces Command, and Republic of Korea (ROK) forces. While the ROK is a first-world nation with a very capable infrastructure, conducting military operations in and around the ROK remains problematic. The ROK's most significant challenge is distribution.

Geographic Challenges

The ROK presents difficulties for USFK sustainment planners. More than 55 million residents live in a country roughly the size of Indiana, and more than half of them dwell in the greater Seoul metropolitan area—a “megacity” by any definition. The most complicated challenge is maintaining access to and mobility on the heavily congested ground lines of communication (LOCs).

The ROK comprises the lower half of the Korean Peninsula. The nation is surrounded by water on all sides except for its north, where a narrow demilitarized zone serves as its only land border. Since this border is with a hostile state, all sustainment that does not originate in the ROK must be flown or shipped into the country.

The Distribution Hub Concept

Extraordinary efforts have been made to ensure support contingencies focus on successful distribution strategies. These strategies emphasize the establishment of distribution hubs and the use of interoperable equipment.

The distribution hub concept used in the ROK has evolved over time. It is a contemporary operational yet nondoctrinal approach developed for use within USFK. Distribution hubs help USFK sustainment planners to rely less on ground LOCs and more on over-the-shore and aerial delivery sustainment methods.

Successfully establishing, employ-

ing, and maintaining a distribution hub requires viable ports, airfields, and outbound road networks. Establishing distribution hubs along the coast in close proximity to these assets extends operational reach. A commander can potentially move units up either or both coasts to create sustainment and distribution centers that provide critically needed commodities and evacuation nodes for casualties or equipment requiring repair.

While coastal distribution hub establishment is an adaptive approach, it is not without difficulties. The Sea of Japan is always congested with traffic, and tidal flats extend out six to eight miles on the Yellow Sea with tidal fluctuations varying up to 30 feet throughout the day. This environment poses significant complications to establishing and maintaining coastal

distribution hubs.

The distribution hub incorporates multiple modes of distribution for both inbound and outbound commodities. Each hub, once established, includes at least two of the following: an airfield, seaport, road network, rail connection, and inland waterway access point.

The interoperable sustainment nodes within the distribution hub are the air terminal supply point (ATSP), the area distribution center (ADC), and the expeditionary seaport. If an expeditionary seaport is not available, or is beyond repair, a beach support area hosting combined joint logistics over-the-shore capabilities can also be used.

The distribution hub is not a fixed size or structure. It is scalable in order to meet operational requirements, and it has the capabilities to

accommodate multiple commodities, including fuel and water.

The Daegu-Busan enclave is an example of an ROK strategic distribution hub. It combines air terminal capabilities at Gimhae International Airport, the seaports at Busan and Chinhae, and storage, transloading, and distribution assets at Camp Carroll near Daegu. Successful distribution hubs leverage U.S. service components and combined forces component processes and systems to build interoperability. A key example is the ATSP.

The ATSP

An ATSP is an operational-level airfield used for aerial resupply and evacuation. It combines the concept of an air terminal with the concept of a ground distribution point. It is a designated air transportation hub



Soldiers, Sailors, and Marines offload equipment from the USNS Pililauu using a roll-on, roll-off discharge facility off the coast of Pohang, Republic of Korea, during combined joint logistics over-the-shore on April 10, 2017. (Photo by Petty Officer 2nd Class Joshua Fulton)

that accommodates the loading and unloading of aircraft and the processing of traffic in support of ground forces.

The ATSP is a critical method that the Combined Forces Command employs using the ROK's abundance of very capable airports that are often in close proximity to seaports and road and rail networks with well-developed infrastructure.

The ATSP and ADC are contemporary non-doctrinal terms used in USFK to fill joint doctrine gaps in terminology and in theater distribution operational concepts.

Proof of Concept

Operation Pacific Reach, conducted in April 2017 in Pohang, ROK, demonstrated the distribution hub concept by using existing port and airfield facilities to sustain alliance operations. This proof of concept was an important step as the alliance between the United Nations, the United States, and the ROK strives to build multifunctional sustainment hubs with synchronized force protection elements. These hubs provide the capabilities to overcome ground LOC congestion, to bridge shortfalls, and to bypass enemy activity.

Joint service equipment interoperability makes the distribution hub concept feasible. For example, fuel distribution begins six to eight miles offshore with the arrival of a fuel tanker. The offshore petroleum discharge system pumps fuel from a tanker to the high-water mark of the coast, where it joins with the amphibious bulk liquid transfer system (ABLTS).

The ABLTS serves as a "traffic cop" for inbound fuel by directing it to a variety of destinations that include on-ground storage tanks and bags for bulk storage. The ABLTS links directly with the inland petroleum distribution system, a pre-positioned stocks asset available for use in support of operations in the ROK. The inland system can move high volumes of fuel many miles to enhance

the ADC's distribution capability and capacity, particularly as a distribution hub matures.

The ABLTS also links with the Marine Corps' assault hose fuel distribution system. This truck-mounted system's configuration makes it rapidly employable and enormously flexible. It adds another distribution capability dimension to a distribution hub.

Finally, the Eighth Army's "Fight Tonight" fuel distribution system, currently in beta testing in the ROK, connects to the ABLTS and ensures force fuel requirements are met during operations emanating from the coastline.

Interoperability

During Operation Pacific Reach, combined distribution exercise sustainers on the Korean Peninsula and stakeholders from across the global joint logistics enterprise demonstrated, coordinated, synchronized, and rehearsed theater logistics to overcome the challenges faced on the Korean Peninsula.

If the Korean Armistice is broken and wartime conditions resume, USFK and the ROK stand ready as a combined force to defend the ROK. Such a defensive effort would include numerous brigade-sized combat elements from the United States and from United Nations countries. When those elements unite with mobilized ROK forces into a combined forces command, the total personnel could easily top one million uniformed service members defending the ROK and repelling Democratic People's Republic of Korea forces.

Interoperability and flexibility are particularly critical in the Korean theater of operations because of the volatile situation anticipated during any conflict, including aggressive enemy special operations, missile strikes, and both friendly and enemy force movements. During Pacific Reach, USFK, in coordination with the ROK and U.S. service components, fielded interoperable systems and developed detailed plans to ensure un-

interrupted force sustainment on the peninsula.

Sustainment options are the logistics courses of action that complement maneuver and air operations executed at the tactical level to extend the reach of operational forces. They include ground distribution points, airfields, seaports, and logistics over-the-shore operations. The ROK can provide much of this capability and capacity.

Sustainment opportunity diversification enables the maximum use of joint resources by leveraging all available LOCs, modes, and nodes. Diversification is a critical capability used to maintain the commander's decision space and to enable multiple options in the fight against the adversary.

Ultimately, using distribution hubs with multimodal throughput nodes, coupled with interoperability, reduces the stress on a single LOC while facilitating the operational reach and endurance of forward forces. These distribution hubs synchronize sustainment across the joint force to ensure that USFK and the alliance protecting the ROK deliver the right things to the right place at the right time.

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