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2002

Reading logistics, a Book Review by David A. Schrady of Pure Logistics by George C. Thorpe; U.S. Naval Logistics in the Second World War by Duncan S. Ballantine; Beans, Bullets and Black Oil by Worrall R. Carter; Logistics in the National Defense by Henry E. Eccles

Schrady, David A.

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Joint Force Quarterly: JFQ, Autumn 2002, v.32, pp. 114-115  
<http://hdl.handle.net/10945/47532>

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# Reading Logistics

By DAVID A. SCHRADY

**F**our classic works on logistics have been reprinted in recent years under the imprint of the Naval War College Press. Although they share a common theme, none deals exclusively with logistics. Moreover, they are no less relevant today than when originally published. George Thorpe argued for establishing a joint staff in *Pure Logistics*. The logistic snowball documented in *U.S. Naval Logistics in the Second World War* by Duncan Ballantine is lamented in *Logistics in the National Defense* by Henry Eccles. And the case for expeditionary logistics is presented in *Beans, Bullets and Black Oil* by Worrall Carter. The books in this series are not intended only for logisticians; they should be read by every joint warfighter.

*Pure Logistics: The Science of War Preparation* is the earliest work and was described by the author as a scientific inquiry into the theory of logistics. Thorpe perceived warfare as strategy, tactics, or logistics and maintained that "strategy provides the scheme of utilizing our forces, and logistics provides the means thereof." He found that failing to accord a proper role to logistics or neglecting to develop strategy and tactics in concert with logistic capabilities had been disastrous in the past. What he noted in 1917 has been proven by subsequent experience.

Thorpe, a Marine officer, also cited the need for joint operations and common logistics. He further observed that "wargames and chart maneuvers are well enough as far as they go, but they do not provide the necessary logistical instruction."

A Naval Reservist during World War II, Ballantine spent the last two years of that conflict in the Office of the Chief of Naval Operations compiling an administrative record of naval logistics. Early in the war the President had directed that a project be established to chart the administrative

## ***Pure Logistics***

by George C. Thorpe  
Newport, Rhode Island: Naval War College Press, 1997.  
122 pp.

## ***U.S. Naval Logistics in the Second World War***

by Duncan S. Ballantine  
Newport, Rhode Island: Naval War College Press, 1998.  
308 pp.

## ***Beans, Bullets and Black Oil***

by Worrall R. Carter  
Newport, Rhode Island: Naval War College Press, 1998.  
482 pp.

## ***Logistics in the National Defense***

by Henry E. Eccles  
Newport, Rhode Island: Naval War College Press, 1997.  
347 pp.

For more information on these titles see:  
<http://www.nwc.navy.mil/press/Books/log.htm>

course of the effort for posterity. *U.S. Naval Logistics in the Second World War* was one result. Far from a tedious chronicle, Ballantine paints a tortured picture of the innumerable attempts by the Navy Department to organize itself to plan and conduct operational logistics.

Logistics is integral to command. As Joint Pub 4-0, *Doctrine for Logistic Support of Joint Operations*, indicates: "To exercise control at the strategic, operational, and tactical levels of war, commanders must also exercise control over logistics." Yet many officers either do not fathom or want to control logistics. As the Navy struggled with logistics in World War II, the Chief of Naval Operations, Admiral Ernest King, remarked: "I don't know what this logistics is that Marshall is always talking about, but I want some of it." For senior military leaders to admit in wartime that they know nothing about logistics is a frightening situation. It stems from failing to recognize that it is part of command. This must have contributed to many attempts to organize for logistics and, as Ballantine recognized, "the growing discrepancy between the forms of naval organization and the emerging character of the logistic task."

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Admiral Chester Nimitz did not establish a logistic element on the Pacific Ocean Area Joint Staff until September 1943. Moreover, the Navy did not produce an overall logistic plan until the end of September 1944. Another problem was that asset visibility was virtually nonexistent. The first inventory was completed at the end of 1944 and limited to the continental United States—there was none taken in theater. Not knowing what was on hand resulted in ordering more.

Although the Navy struggled with operational logistics, forces afloat were being supported by diligent and creative operators. Carter was one of those players in the Pacific. *Beans, Bullets, and Black Oil* deals with providing resources to sustain men, aircraft, and ships; but it is also about facilities, maintenance, and battle damage repair for those forces. It is an account of expeditionary logistics on a grand scale with maps, illustrations, and photographs.

Wargames conducted during the 1920s and 1930s at Newport and elsewhere indicated that because of geography in the Pacific, the outcome of a conflict would be determined by the ability to transport and sustain forces at great distances from home. The Navy commissioned studies of advanced bases in 1938. After the war began, large forward logistic sites were established ashore in the southwest Pacific. But as bases were being developed, it was apparent that they would soon be too far in the rear to support advancing forces optimally.

The concept of mobile sea bases that could move with the forces was developed at this point. Instead of logistic bases ashore, logistic support was assembled in ships of mobile service squadrons. There were vessels to transport fuel and ammunition, distill and store water, serve as barracks and hospitals, perform maintenance, et al. All they required was a secure lagoon or harbor. The original location of Service Squadron Ten under Admiral Carter was Majuro in the Marshall Islands, some 2,000 miles north of bases at Espiritu Santo and Nomeau. The squadron then moved 800 miles west to Eniwetok, 1,300 miles west to Ulithi, and another 1,000 miles west to Leyte, following and supporting the combat fleet. As Carter said, "The advantages of logistics afloat and near the fleet operating area had long been recognized by many naval commanders and no doubt by others who gave the matter analytical thought."

Carter brings logistics in the Pacific theater to life. It was sea-based logistics—responsive to the warfighters—and it minimized time away from combat for replenishment. It also maintained and repaired ships in theater and returned

battle damaged vessels to service, thereby conserving the strength of the forward operating forces. The value of sturdy ships and a strong repair capability is strikingly demonstrated.

*Logistics in the National Defense* is based on the experiences of Admiral Eccles both during World War II and in the classroom at Newport. His book is focused on operational factors such as the logistic snowball and organizational issues, which are treated comprehensively.

A logistic snowball is a buildup of stocks far beyond need and results from various causes. Recalling *Industrial Dynamics* by Jay Forrester in 1961, the use of all the spares of a given item is interpreted on the unit level as underplanning, and the remedy is overplanning. If ten spares are used, the call goes out for a hundred replacements so the item will never again be out of stock. Planners at the next echelon record a tenfold increase in demand and move ten times more spares than required to the theater, having a snowball effect. Discipline and asset visibility are required to control the process. In *Desert Storm*, visibility was lost when items moved from supply channels to the transportation system. And without asset visibility and timely delivery, units assumed that their orders were misplaced and reordered. This resulted in a mountain of iron on the beach among other problems. Since then attention has been given to attaining asset visibility, including in-transit visibility, and the concept of focused logistics, all aimed at reducing the logistic footprint ashore.

These books are classics and good reading. They contain important lessons about logistics in war and the exercise of command. The Naval War College is to be commended for making them available again. Making new mistakes may be unavoidable, but repeating old ones should not be tolerated under any circumstances. **JFQ**