by Lieutenant Colonel James B. Soper, U. S. Marine Corps

The thunder of U. S. naval gunfire reverberating from Vietnam and the success of such fire support is being heard in Washington, even by those who do not want to acknowledge it for fear it might upset some carefully nurtured theories.

Today's newspapers seem to mention the naval gunfire activities of the Seventh Fleet's destroyers and cruisers on an almost daily basis. Numerous Viet Cong attacks, especially against the lightly equipped forces of South Vietnam, have been beaten off again and again by the accuracy and heavy volume of fire from U. S. ships offshore. The exemplary use and effectiveness of naval gunfire during the highly successful STARLIGHT assault operation at Chu Lai in August 1965 demonstrates the offensive capability of this age old but basic weapon.* Thus, we find that naval gunfire—so long considered by many to be earmarked for oblivion—has pulled itself up by its own lanyards simply because of its undeniable merit as a presently irreplaceable supporting arm for ground operations and assault.

Naval gunfire's enormous popularity with U. S. ground forces is based simply upon its effectiveness. Despite the many outstanding advances in close air support techniques, the role of naval guns remains dominant in amphibious assault operations because of their weight of fire, rapidity of response, continuous availability during all weather conditions, economy of the means at the point of application, and the capability of bringing peak power to bear at the moment of landing.

Conversely, many of the above attributes of naval gunfire apply to the support that it is capable of giving to the defenders of any ground position within range of its rifles. On this point, it was disturbing to read the news reports of February and March 1966 which referred to the central and northern coastal valleys of South Vietnam, that had been occupied by the Viet Cong with impunity for several years; a map clearly shows that most of these areas are within the effective range of the main batteries of the *Iowa*-class battleships. Undoubtedly, many casualties among the members of the 1st Cavalry Division and the III Marine Amphibious Force could have been prevented if these valleys had been subjected to months of steady, unremitting, around-the-clock bombardment by the battleships prior to the actual assault of these areas by the ground forces. There is even the possibility that the assaults would not have been

* *See* George Fielding Eliot, "Confidence in the Sea," U. S. Naval Institute PROCEEDINGS, May, 1966, pp. 64–71.

**A spotter watches the explosion of white phosphorus shells as the USS *Richard B. Anderson* (DD-786) fires an emergency gunfire support mission against Vietnam's Banangan Peninsula.**

*R. D. Moeser*

necessary, due to the denial of the area to the Viet Cong because of the lethality of the 16-inch round when applied to concrete bunkers, and other well-hidden and so-called "invulnerable" entrenchments.

Certainly, none of these tributes to the effectiveness of naval gunfire is meant to degrade the importance and essentiality of air power. Rather, it is desired to point out that both of these supporting arms are vital. It is not, in other words, a simple case of one or the other. Each form of support has its own capabilities and limitations. Air support and naval gunfire support are complementary rather than competitive. Under certain circumstances, of course, each has decided advantages over the other. But, when used in co-ordination, they complement each other with grim efficiency. Responsible combat-experienced Marine officers and Army officers are fully aware of this fact.

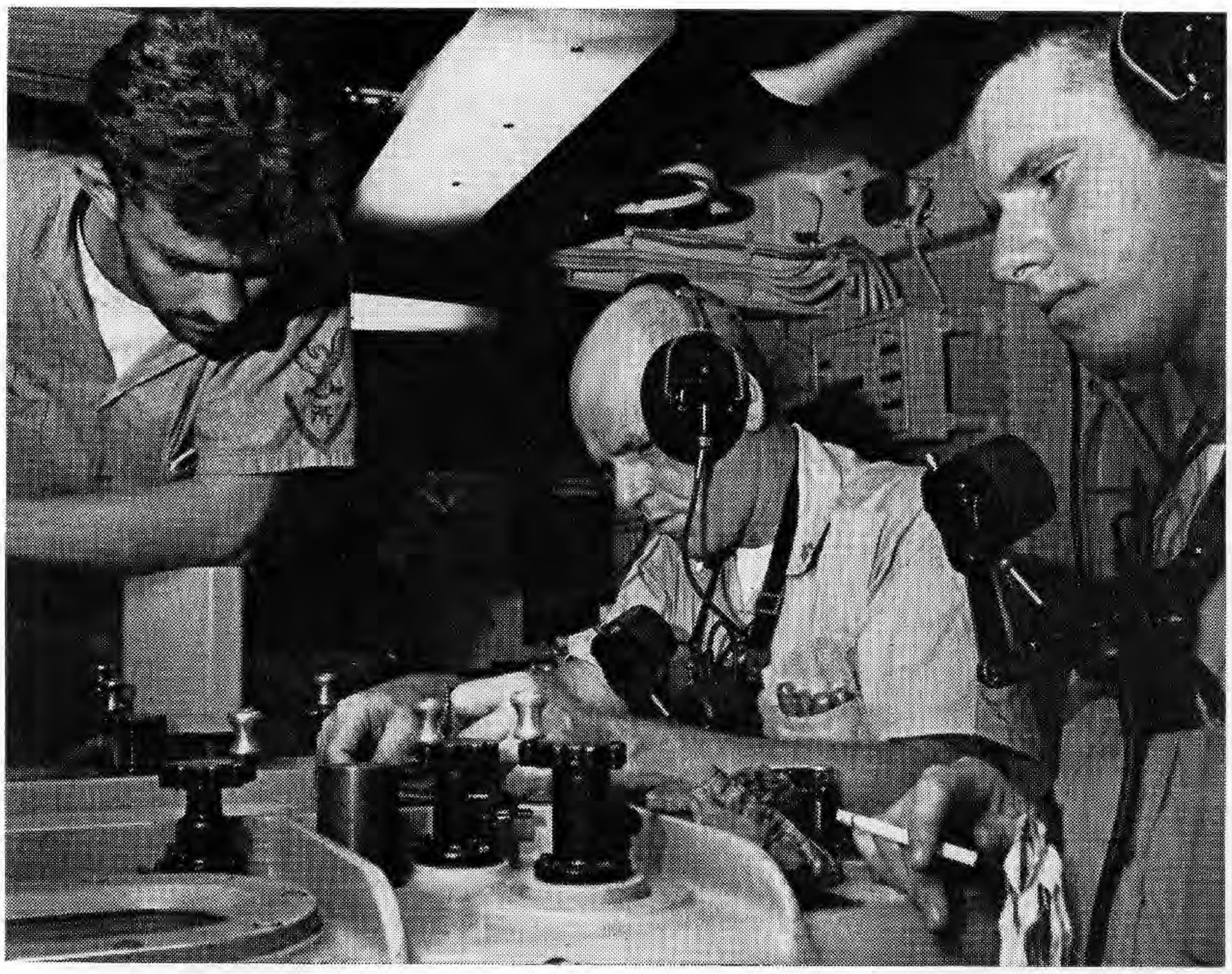
The problem during the long relapse of naval gunfire between 1954 and 1964 was simply that various civilian and military analysts were obsessed with a "one-or-the-other" philosophy.

Fortunately, the need for the heavy naval gun and its peculiar assets has been recognized by the Secretary of Defense in response to the Navy's well-documented program in this area. Mr. McNamara announced to the press and to Congress in February and March of 1966 that the present heavy, eight-inch gun cruisers would be retained on active duty. This is especially significant when added to the recent reactivation of the USS *Carronade* (IFS-1) and three LSMRs, which had been approved and funded last year. Certainly such actions represent a consideration of the hard requirements of combat and the results of recent large-scale exercises* rather than the "no-alternative-to-air-support" theorists.

What else must still be done to meet combat needs for assistance—specifically, gunfire support—during amphibious assault operations of the 1970s? Will the planned Landing Fire Support ship (LFS) be able to replace the cruiser and perhaps even approximate the non-existent battleship? Is the battleship actually so costly to maintain when employed solely as a gunfire platform? And would it be cheaper to use the already existing hull and machinery and the known-combat-proven effectiveness of the battleship rather than design a new super rocket ship, with its attendant research, development, and experimental costs?

Answers to these questions and others of a similar nature are being sought by the Departments of Defense and of the Navy. Every military officer should contemplate them also. The nature of the threats throughout the world seem to indicate clearly that U. S. ground forces may be called upon to repel Communist aggression. Every attempt to

* *See* J. B. Soper, "Observations: STEEL PIKE and SILVER LANCE," U. S. Naval Institute PROCEEDINGS, November 1965, pp. 46–58.



**A senior chief fire control technician records ranges, bearings, and target corrections in the plotting room of a destroyer off Vietnam where naval gunfire, long in the shadow of the more glamorous close air support, is proving to be a most effective supporting arm for ground operations and assault.**

*R. D. Moeser*

"hold the line" by indirect methods in the past has failed and certainly the future is portentous. The only effective instrument against insurgency and terror has proven to be the strong man on the ground. But for all his strength, he can not stand alone; he needs support of all types. If he is placed ashore by administrative means, through airlift or sealift modes, and he operates close to the shore, as is the case in many Vietnam operations, naval gunfire can be a valuable supporting weapon. If, of course, he is transported ashore as part of an amphibious assault, naval gunfire becomes a vital necessity. The question for the future, then, is not, "do we need naval gunfire," but rather, "what type of naval gunfire do we need?"

Recent study group efforts within the Department of Defense have been concentrating on the development of the "program definition" for the proposed LFS class gunfire support ship. Although many of the details are currently classified, certain broad capabilities and characteristics have become known.

First, this new ship type is being designed to include as much automation as possible in order to reduce the size of the crew that will be required to man and fight the vessel. The large crew required has always been one of the factors cited against the reactivation of the battleship for a purely naval gunfire role. Despite the desire for a small manning level, however, the LFS is envisioned by its planners as possessing both a heavy weapon capability for hard targets and a rocket saturation capability for neutralization fire. Thus, the new gunfire platform would be able to deliver both types of gunfire support and, in effect, combine the capabilities of the present rocket ship and the cruiser. Whether or not this proposed multicapability ship could actually combine shotgun/rifle capabilities effectively is one of the major conclusions expected from the current studies.

Certainly another avenue of approach to the business of future gunfire support would be a much more detailed analysis of the present IFS's growth potential. The *Carronade*, both prior to her deactivation and in the few months since her return to active duty, has shown significant fire power. Recent articles in Navy publications have reported on this ship's accurate and heavy volume of fire delivered during her refresher training period in the San Diego area. It seems entirely possible that a partial answer to the modernization of naval gunfire support may have been tied to the pier for the past five or six years.

Only actual combat experience can determine the true capabilities of the IFS, or of a modernized and expanded version of the IFS, but it is unfortunate that a ship of such a recent design was deprived of valuable training experience during the past few years. It is even more frustrating when viewed against the background of the "gun gap" that existed during the Cuban Crisis of 1962, when the Navy's amphibious force planners and those

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of the II Marine Expeditionary Force and the XVIII Airborne Corps were faced with the prospect of making an assault landing without adequate naval gunfire support.

Vice Admiral John S. McCain's "commando" battleship was a new idea that fired the imagination of many sea power advocates, and especially those who still remember the awful damage that can be dealt out from 16-inch naval rifles.* There are not many members of the armed forces still on active duty who have been on the receiving end of battleship gunfire. Of those who have, there would be few who would deny that the fury of a battleship attack makes artillery fire or air strikes seem merely annoying by comparison.

Some say that the "commando" battleship suffered by a multiplicity of tasks envisioned. The combination of an APA, LPH, AKA, BB, and AGC in one hull, even one as superior as the *Iowa*-class battleship, seemed to militate against her acceptance. Such a combination of tasks, however, is in strict accordance with the expressed desire of the Chief of Naval Operations that multipurpose ships be developed for the future.

Perhaps the ship's undoing, for the time being at least, was the fact that the operational concept was never fully developed to the satisfaction of the programmers who had to evaluate the proposal. And what a concept it was—and is: participating in advance force operations, conducting the pre-landing bombardment, controling the ship-to-shore operations, while at the same time being part of the subordinate task organization that is conducting the actual surface and vertical assaults, and, in addition, providing on-call naval gunfire support!

This does not mean that these tasks could not be performed in a nearly simultaneous sequence or that procedures could not be developed to accommodate such a multi-tasked ship. Every one of the naval gunfire studies of the recent past, and the current efforts, have considered the "commando" battleship idea. In all likelihood, such a proposal cannot be completely discarded as long as the four *Iowa*-class hulls remain. Described by one Ship Systems Command official as possessing the finest conventional machinery plants and most efficient hull design in existence, these unactivated ships will continue to fill our own planners with nagging doubts and enemy planners with mortal dread.

Would not 16-inch rifles have been very welcome in 1962? Could not they be used in Vietnam today just as they were when they beat out the cadence for the advance in the South Pacific during World War II—or when they sought out and smashed the German armor behind the Normandy beaches, at a time when all of the Allied force's vast air power was only 30 miles away, but helpless due to bad weather? *You know they could!*

* *See* John S. McCain, Jr., "Amphibious Warfare During the Next Decade," U. S. Naval Institute PROCEEDINGS, January 1963, pp. 104–111.

**The cruiser's gunfire role could be enhanced by a real breakthrough in surface to surface missiles. But the price is presently prohibitive. No existing or envisioned missile begins to approach the lethality and accuracy of the cruiser's guns at even a fraction of their cost.**

*R. D. Moeser*

Perhaps the current study efforts may determine that battleships with reduced crews, and devoted to the task of naval gunfire only, may provide the best "cost-effectiveness" answer. Certainly it must be examined in full and objective detail—free from any bias or prejudgment.

The present cruisers, heavy and light, with or without missiles, represent today's sluggers in the naval gunfire field.

Destroyers, with their 5-inch weapons, are performing the same gunfire tasks today as they did over 20 years ago. They are the alter egos of the maneuvering battalion landing teams. They work with them directly, and they support them directly. The fire of the cruisers, with their heavier projectiles, provides a more general support as needed. Of course, both ships are used to assist in the defense of objectives and areas. The close coordination of air and naval fire support is essential and when the landing force's artillery is ashore and operating this co-ordination must be expanded accordingly.

Both of these types of ships, then, represent what is at hand today and what is being used today. As long as Communist aggression continues to pollute the littorals of the world, there does not seem to be a foreseeable time when naval gunfire will not be required as a libratory adjunct to air power. Mobile, all-weather support will continue to be a ground force and landing force requirement. Naval gunnery provides a unique capability in this regard that augments rather than challenges air power, which must often be employed on deeper targets, interdiction, and those other opportunities most compatible with its sophisticated assets.

What modifications could make the cruiser even more effective in her gunfire role? Primarily, a real breakthrough in surface-to-surface missiles is needed. To date, such missiles have been restricted to terminal guidance or other sophisticated approaches that are not reliable under battlefield situations. Naval gunfire, on the other hand, is both effective and cheap. Unfortunately, missile manufacturers who have worked on a naval gunfire weapon for the Navy have constantly presented a missile so expensive that it would not be fired for the purpose intended. This has been in spite of the Marine and naval officers who have attempted to convey the principles of naval gunfire employment. Certainly it suffices to say that no existing or envisioned missile begins to approach the lethality and accuracy of the 16-inch or 8-inch naval gun at even a fraction of their cost.

As the representative of one large West Coast aircraft corporation stated at a conference with Navy, Army, and Marine Corps officers in the Headquarters of the Amphibious Force, Atlantic Fleet several years ago, if his company were authorized to develop an expensive, sophisticated replacement for the heavy naval gun, it would be easier than developing an accurate, inexpensive one."

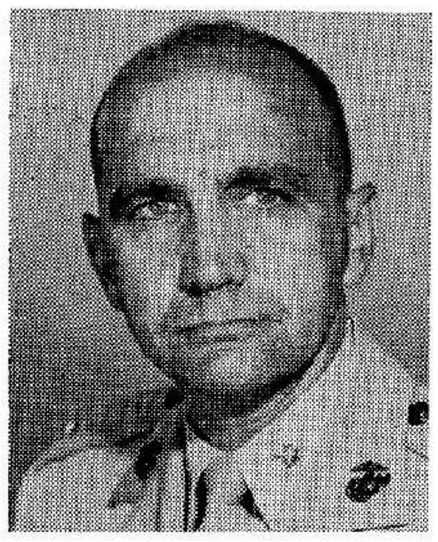
The new hope in this area of important sup-

**Why not bring the USS *Iowa* (BB-61) and her three sister ships out of mothballs and man them with reduced crews devoted only to naval gunfire? Surely, says the author, there will be a continuing need for ships whose 16-inch rifles can hurl a 2,700-pound projectile 24 miles.**

port seems to rest in a great measure on the outcome of the current studies now well underway. The prospect of a lightweight family of naval guns capable of firing against hard targets and installed aboard a hull of relatively light displacement offers great hope, if it can truly meet the tasks required. (A fear here would be that a system may be devised that appears great to the theorist and systems analyst but may not provide the hitting power, simplicity, and volume of fire required by the forces being supported.) Yet, it would seem that this is the path that offers the best approach for the future.

Such a ship would have to possess a speed above that of the rest of the amphibious force in order to participate in advance force operations prior to the arrival of the task force. The LFS would need to possess a rocket-assisted gun capability in the 175-mm. range, for normal destruction fires; and a rocket capability, for the neutralization fires needed during the moments prior to landing. In order actually to fulfill the full spectrum of naval gunfire assault needs, the ship would also need to possess a surface-to-surface missile comparable with the hitting power and accuracy of the 16-inch gun for deeper or more heavily reinforced targets within the beachhead area. After the initial assault, or when employed to support ground forces already ashore, the light-weight guns and heavy missiles would be used for on-call fire support.

Such new gunfire platforms as described above would be especially adaptable to the direct or general support of a regimental landing team, or the general support of a division level landing. Because of their more complex operational procedures, Landing Fire Support ships would not be suitable replacements for the direct gunfire support now provided by destroyers. Also, it would have to be remembered by those employing the new LFS-type ships, that they cannot reduce the number of gunfire ships required on some arbitrary ratio basis simply because of the multiplicity of their fire systems. Perhaps, with the newer technology, some reduction may be possible, but the fact remains that the new ships could not be in two places at one time, or even conduct various direct support and general support missions at the same time, under most circumstances.



Lieutenant Colonel Soper served with the Second Marine Division from 1941 to 1943, and as embarkation officer in the USS *Dawson* (APA-79) from 1944 to 1946. During his 25 years of service, he had commanded a platoon (1946–1947), a rifle company (1954), a battalion (1957–1958), and a Marine Barracks (Sasebo, Japan, 1950–1952). A graduate of the Naval War College in 1960, he was Navy Plans Officer at Marine Corps Headquarters from 1962 until 1965 when he was assigned as a student at the National War College. He is now serving with the III Amphibious Force, Western Pacific.

From the present-day gunfire support study efforts will evolve a matrix of designs and alternatives. For the proposed new Landing Force Support Ship, which is being designed from the keel up primarily as a gunfire support system, a series of weapon combinations should take form. Examples might include a support missile, three lightweight—but large caliber—guns, and perhaps eight rocket launchers. The combinations could be varied widely depending upon the research and the professional judgment introduced. A modest, secondary, ASW capability may also be feasible.

Nor does the development of the LFS represent the only new research in this area. Other systems, involving high altitude probes and similar by-products from space technology are being evaluated for potential study. Such explorations only highlight that there is no limit to ingenuity as long as there is a desire to accomplish a particular task, which has finally (after the lost decade between 1954–1964) been accepted as a necessary part of the nation's over-all defense requirements.

Serious and continuous efforts and studies are being made to provide modern naval gunfire support in the future. Such studies are endeavoring to weld modern technical knowledge with the combat-proven requirements determined by the man on the ground who calls for the round. Yet, at the present time, a serious deficiency in our country's naval gunfire capability does exist.

The recent actions which have rescinded the previous inactivation orders and retained

in the Navy two of our heavy cruisers may portend an eventual complete recovery from the malaise that almost eliminated the naval gun as a heavy striking weapon. And, had we lost them, what would we have lost? A study of the Vietnam coastline offers one answer. Even the layman can see the virtually unlimited opportunities in Southeast Asia for the employment of naval guns—and especially those of the great battleships now tied to buoys in back-waters.

One of the most persuasive arguments for the reactivation of one or more of the battleships for tasks made to order for their capabilities is that these ships exist *now*. Their 16-inch ammunition is available *now*. Their hulls and machinery are of known quality *now*.

Studies which have been started with the avowed intention of ignoring the battleships have been unable to do so because of the realities mentioned above. Nor does it appear likely that any objective study effort could ever ignore them.

There are problems, of course, such as personnel requirements, but these are no more serious than those faced by the services in their expansion since February 1965. A reduced engineering force could lessen this problem. A battleship employed as a gunfire platform would not require any more aerial defense than its own anti-aircraft means and those of the anti-air cruisers and destroyers that would be protecting the area or transit in any event. Certainly, the amphibious assault ships travel to the same objective areas with far less armor, and so will the proposed LFS.

A compelling case for return of the battleship could be made now, as a significant "gun gap" filler that could extend well into the mid-range period when the new support ships begin to arrive on the scene. This conjecture cannot be ignored in the present circumstances of U. S. commitments. Now, in 1966, Congress is asking where the battleships are that have been bought and paid for in the past and were being held in readiness for just such a mission as today's: the support of ground forces in combat.

Naval gunfire today—represented by the destroyers and the cruisers and the rocket ships—is in a much improved position over that of the past decade. It is being talked about, it is being used, and it is getting results on the battlefield. In summary, a most serious deterioration has been stopped and improved by recent DOD action.

Naval gunfire for tomorrow—envisioning the new Landing Fire Support ships as the main backbone of the modern era—seems to be moving towards a healthy future. It shows that modern programming can meet the old but vital requirements when supplemented with enthusiasm and talent. Still, such new innovations are many years away. The long guns of the battleships should provide the bridge between today and tomorrow.

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