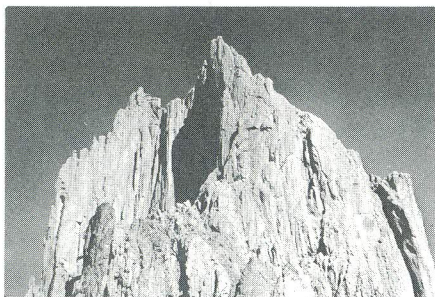


*Shiprock from the southeast showing the Southwest Buttress and the South Wall on the left and the Honeycomb Gully on the right.*



*Below: The unclimbed Southwest Buttress directly below the south summit. The West Wall, the Horn, and the north summit in the background.*

# SHIPROCK:

This article is written partly in response to Steve Roper's recent actions<sup>(1)</sup> and partly to try and stem some of the rumors, half-truths, and conflicting statements about one of America's most unique climbs. I hear that Shiprock is easy, for it has been made in a couple of hours. I hear it is difficult, for parties have found disaster, death, and have abandoned quantities of equipment on it. I now hear it is "virtually impossible"<sup>(2)</sup> due to the bolt chopping, yet the entire climb has been made fifth class.

## Brief History

The first serious attempt on Shiprock was by Orms and Hause in 1938. This was unsuccessful and the party turned back after Orms fell on Orms Rib. The next year the climb was successfully made by Bedayn, Robinson, Dyer, and Brower of the Sierra Club and was the first successful use of expansion bolts in sixth class climbing. Their route was so ingenious that it was ten years and a number of attempts before it was climbed again.

Since 1959 the climb has been made fairly frequently, too often by people inadequately prepared for the physical conditions of the climb.

## The Nature of the Rock

Shiprock is the plugged vent of a forty- or fifty-million-year-old volcano. Erosion has removed several thousand feet of land since the volcano was

active, so if you wish to visualize the formation of Shiprock you must imagine a moderate sized volcano erupting on a land surface that was higher, although not much higher, than the present summit of Shiprock. The lava came up from a mile or more beneath this surface and ripped up chunks of the rocks it passed through, carrying them along with it. When the volcano became inactive the molten rock in the vent solidified to form a fine-grained yellowish rock. Although it's geologically inaccurate, we climbers can call this rock "rhyolite." The ripped-up chunks of foreign rocks were caught in the solidifying rhyolite and are called "xenoliths," examples of which are the granite boulder in the Bowl and the large block of fossiliferous limestone at the base of Shiprock.

Final eruptions of a darker magma cut the solidified rhyolite and cooled to form the dikes of basalt. Erosion has now stripped away the surrounding sandstones and sculptured the rock to form a magnificent monolith standing nearly 2,000 feet above the sandy desert.

Rhyolite is just a quickly cooled and fine-grained equivalent of granite and since it is formed of minute, interlocking crystals, it should be a hard, tough rock. It is hard and tough where it has not been weathered but, unfortunately, the rhyolite of Shiprock is very susceptible to the chemical attack of water<sup>(3)</sup>. The outer several inches of the rock

(3) Most common minerals, with the exception of quartz, have an affinity for water which causes the crystals to expand, decompose, and turn to clay.

(1) Summit, v. 10, n. 5, p. 24-26

(2) Summit, V. 10, n. 5, p. 30

# it's nature and ascent

By Dwight Deal

has partially decomposed to form a coating of crumbly incompetent material.

Shiprock is a small rock mass, as masses of igneous rock go. It has few joints, which are the cracks and flaws you find cutting most granite faces. As a result, the rhyolite of Shiprock is very short on piton cracks and, because of the decomposition of the surface, the cracks that do exist tend to be rounded and crumbly and actually wear out with repeated use. The flakes you find to stand on often break under you. Fortunately, the regular route is cleaner than the rest of the rock, as most of the looser material has been removed by previous climbers. The gullies are smooth and flawless.

The basalt in the dikes is of a different nature. It cooled more quickly and has smaller, microscopic grains. The basalt is highly fractured and is very easily pried off in blocks by frost wedging. It is much harder on the surface than the rhyolite because it does not have as great a tendency to decompose. There are, therefore, many piton cracks in the basalt, but your chance of prying off a good sized block is as good as that of placing a sound piton. This is one of the reasons for wearing hard hats on Shiprock, especially on the Basalt Wall.

## The Climb

The route is ingenious and the rock huge. Although both are realized by all who reach the summit, the size is not appreciated by many until it is nearly too late.

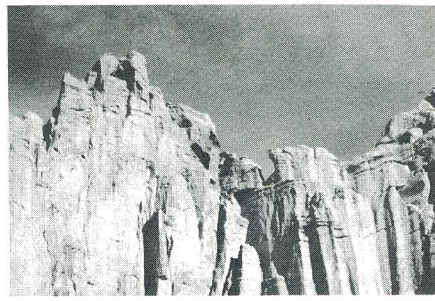
There is nothing for scale. When you stand at Shiprock's base it could be 200 feet or 2,000 feet tall. Just about every climber new to Shiprock and approaching from the southeast spies the prominent black crack in the south wall and wonders if it has ever been climbed. They are always surprised to find that the seemingly narrow chimney is in reality a gaping, rounded, overhung gully fifteen feet wide. Only when you actually get on the rock or see someone else as a speck half-way up, does the true scale sink in.

The climb is primarily a mountaineering challenge with the special problems of mountaineering in the arid southwest. It's not much of a rock climb. There are five widely separated fifth class moves, three sixth class pitches—one fifteen feet long and the other two essentially one move apiece, and the Rappel Gully, which I suppose you have to call sixth class, although it's sort of a special case. The first ascent party had two less fifth class moves, fifteen feet more of sixth class, twenty feet more of fifth class on crumbly, treacherous rock, and one more short rappel. All the rest is third and fourth class scrambling.

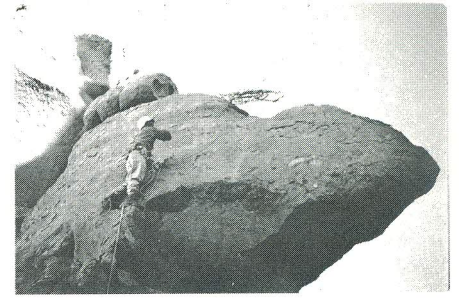
Shiprock is a challenge, however. If you take the above comments at face value and run down to Shiprock on your summer vacation you are probably in for a hideous experience. Summer temperatures invariably rise above 100 degrees F., sometimes quite a bit. There is no water anywhere near Shiprock. The yellow rhyolite becomes hot to touch and



*Looking down the West Wall to the camping spot and the cars from the Notch below the Horn.*



*Telephoto of the Notch and the Horn from the campground.*



*Throwing the rope over the Horn for protection on the fifth class move.*

the walls reflect heat like a reflector oven. Temperatures in the sunny gullies can rise more than 20 degrees F. above that of the surrounding air, which is hot enough to begin with. Nor do you want to head there over Christmas vacation. Northwestern New Mexico has some severe winter weather with sub-zero temperatures and howling snow storms.

The best climbing weather is in October and early November. Thanksgiving time is usually good, but the first winter snow caught a University of Wyoming group there in 1959 and turned what is normally a six- to eight-hour round trip into a twenty-hour ordeal. Fortunately, that group was wise to the ways of Shiprock and had carried what seemed to be an excessive amount of warm clothing; other groups have not been so prudent. Easter time is something more of a gamble with the weather. Spring is sometimes almost non-existent in this part of the country, with searing heat the day after a snowstorm.

The first few ascents all took two days or more, with a bivouac in the Bowl. Now a strong party with a *good knowledge of the route* and good weather can easily make the summit in four hours. Please note that the route is ingenious and that the route finding problems of the first few parties was the greatest part of the challenge. We know the route now, and that part of the challenge can never be restored by bolt chopping. For the first ascent party the very thought of using expansion bolts was new and there was the challenge of pioneering a new technique to overcome smooth, crumbling overhangs. We can't restore this challenge either, as Roper dramatically points out. Everyone knows about bolts.

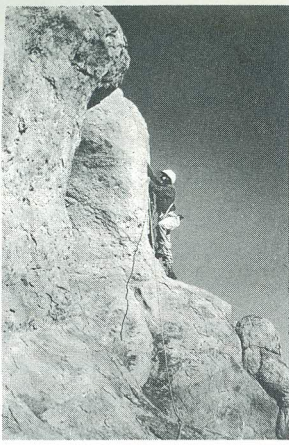
The usual camping spot is at the north end of the South Dike and can be driven to from the highway

south of the town of Shiprock and southeast of Shiprock itself. The approach is made on the gravel road that leads to Redrock. Most new climbers turn off too soon and head cross-country for Shiprock. This is adventurous and can be avoided by staying on the main gravel road all the way to the South Dike where you turn north along its east side. The road crosses over to the west side of the dike a hundred feet from its end at the second possible place to cross. The road ends at the camping spot, nestled under the towering West Wall beneath the Horn.

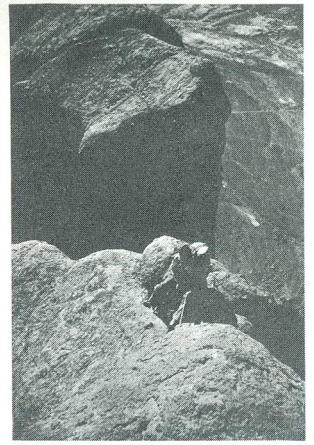
You will probably be visited by the Navajo Tribal Rangers as you are on their reservation. Please be polite. They have the power to throw you in the clink and recommend to the tribal council that the area be entirely closed to climbers. Shiprock is not closed, as are other areas in the reservation because of the Navajo's religious beliefs, but it could easily be closed if climbers become a nuisance.

The following description of the climb assumes a good climbing day in October, but go prepared with lots of water, food, and bivouac gear. Start early.

The start of the climb is on the Basalt Wall on the northwest side of the rock and at the end of a well-worn trail from the camping spot. The very first move is overhanging and is usually done sixth class by snapping a sling into a piton. From there it's a long series of scrambles, some fourth class, to the point where the wall becomes vertical. Keep to the left gully to avoid the vertical wall half-way up. Unless you've been on the rock before it is often hard to find the correct start for the Flake pitch. At the last wide broken ledge on the Basalt Wall traverse right toward the notch which marks the top of the



*The last sixth class move, above the Horn.*



*Looking down onto the top of the Horn. Note the width of the roads at the base of Shiprock.*

Rappel Gully, which descends the other side of Shiprock. Do not start directly beneath the notch, but rather start climbing up and slightly toward the notch about seventy feet before you would be under it. From this position it may be difficult to see the notch. Fix its position before you start traversing right on the big ledge. The Flake is the first fifth class move on the climb (unless you strayed too far to the right down below) and is obvious once you get to it. It is protected by a large angle piton driven in above it. You can either hand traverse six feet to the right, using the top of the Flake as a handhold, or more elegantly stand up on top of the Flake and walk to the right. Some even throw a leg over the top and crawl across, but after all. . .!! It's advisable to belay from the alcove eight or ten feet above the Flake as the next twenty feet is an outsloping traverse to the right and the rope friction is bad if you do it all at once. Lots of cracks (watch out for loose rocks) here if you want piton protection.

The top of the Rappel Gully can be rigged nicely with a 150-foot rope. Only about 70 feet are vertical and they have to be prusicked up on the descent. This rappel will put you on top of some chalk stones from which the bottom part of the Rappel Gully is rigged. If you have two three-rung stirrups, hang them end from end and down through the hole in the chalk stones. This avoids having to prusik here on the way back.

There should be a bolt to anchor the start of the Traverse, which extends south. You are now on the east side of Shiprock. The Traverse is mostly fourth class, and level. You step up a few feet at a rounded vertical crack and then move across and slightly down with an easy fifth class move to a niche, the

end of the Traverse proper. The original ascents kept higher at the end of the Traverse and made a short rappel down to the niche, avoiding the fifth class move. Almost since the beginning of the use of the fifth class move rather than the rappel at the end of the Traverse, there has been a bolt at the move for protection. There should be one. There should also be a bolt at the end of the Traverse for an anchor. We usually use a 200-foot rope for the Traverse, although 150 feet is sufficient, and tie a fixed line across for the rest of the party to use, especially if it is a large group. The rest of the rope is then used as a fixed line around to the base of the Double Overhang. You get there by continuing to traverse down and then up around a corner. There is one awkward fifth class step up at a vertical crack to a ledge and some short climbers are forced to resort to a piton and a sling.

You are now above the Honeycomb Gully, the prominent feature of Shiprock when viewed from the east. Until 1960 the route was up the right side and then the center of the Double Overhang, about fifteen feet of which is direct aid. The discovery of the traverse and climb around the Double Overhang has now made the climb faster and more interesting.

Continue to traverse down and to the end of the ledge below the Double Overhang. There should be a bolt here for a tie-in for the belayer; one was placed by the first ascent party. From here you can reach the bolt out and around the corner, clip in, and step around into a small pocket that makes a firm, airy foothold poised 800 feet over the Honeycomb Gully. The first move above the foothold is probably the hardest on the climb. When dry the move is about 5.5. Above that are a few easier fifth class steps. A

### **Shiprock** *continued*

bolt has been placed at the top of the pitch for a belay anchor.

After traversing left, climbing above the next overhang, and traversing right, the first ascent route is rejoined at the base of the Ramp, an outsloping ledge leading upward to the left into the Bowl. The first parties usually bivouacked under the small overhangs on the right side of the Bowl.

From the Ramp it's a scramble across rubble past the granite boulder and up to the Notch beneath the Horn. The lower south summit can be reached from this point but the regular route continues to the north summit. At the Notch you can again look west, and down. The Notch is right over the camping spot and often you can clearly hear low voices in camp while shouting your lungs out to be heard. There are some peculiar acoustical effects on Shiprock and the situation is sometimes reversed when you're in one of the gulleys. Sometimes a whisper up there will be heard *very* clearly 2,000 feet below by someone you don't even realize is there. It can be most embarrassing!

The Horn pitch starts on the east side of the Notch and requires about fifteen feet of stirrups hung from pitons. In the process you swing around through the the Notch and out onto the West Wall with nearly 1,500 feet of flawless vertical rock beneath your feet. The usual procedure is to take an extra rope along and after climbing as high as you can above the aid pitch to throw it over the top of the Horn. It then falls back down to the ledge you started from on the east side and the leader has an upper belay for the fifth class move to the top of the Horn. This is about as hard as the move around the Double Overhang.

Above the Horn and after a short traverse to the right, a vertical crack and a piton for a stirrup make the last sixth class move. The trick here is to get your right foot in the highest step of the stirrup as there is an awkward step to the left at the top. From here it's fourth class to the north summit.

The descent follows the original ascent route more closely. Climb down and rappel from a boulder to

one of the original Sierra Club bolts (if it's still there) at the top of the Horn. There is a short rappel from here down the east side of the Horn. Climb down to the top of the Double Overhang being careful on the outsloping Ramp, especially if you have a pack. Again rappel from a bolt to the Traverse. Head back across that and up the Rappel Gully, the top seventy feet with prusik technique. Instead of returning via the Flake, it is possible to climb over a knob and down the Basalt Wall to the left, toward the pinnacle mentioned earlier. Watch out for loose rock. From here a long rappel can be rigged to the large broken ledge. You'll need a full 150 feet of rope. From here it's usually across to the north side of the Basalt Wall and back down the way you came up. Some rappel the drop in the middle of the Wall, but don't try it in the dark as you'll end up on the end of your rope fifty feet above solid footing. And watch that last step. I've seen several tired climbers almost forget about that little aid move on the way down.

### **The Southwest Buttress of Shiprock**

A few final words about Shiprock and what I believe will prove to be a new ascent route. There is an almost continuous, but very obvious, crack system up the Southwest Buttress. Standing and looking at Shiprock it looks impossible, but a series of photographs taken from different angles and under different lighting conditions distinctly show the system. The wall is vertical to overhanging for almost one thousand feet, and there will be sixth class, including about an eighty-foot pendulum. There is a good chance that a number of the cracks can be jammed, and there are several long laybacks that should go free. This will not be a direct route to the summit but will be just behind the left skyline of the photo on the cover of the June, 1964, issue of *Summit*, and will emerge on the broken shelf below the south summit. From there it is possible to traverse around over the Honeycomb Gully, prominent on the right of the same photo, and into the Bowl above the Ramp. As far as I know, no one has tried this route since I left it two years ago. Good luck!