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PHOTO BY GABE CORTELYOU

BRIDGEPORT HELITACK: EYES IN THE SKY AND BOOTS ON THE GROUND

Every day, millions of people head to work in some form of transportation. Cars, buses, bicycles. They walk, take the subway, carpool with kids or coworkers.

There are a very select few, however, who do none of these things. There are some who, through their unique career choice, head to the job site by way of helicopter. Instead of music or talk radio, they listen to the whir of rotors and a dispatcher giving them critical information about the fire they are flying into.

These people are wildland firefighters who work on what is known as a helitack crew. The word helitack is a portmanteau, or blend, of the words “helicopter” and “attack”, an apt description of just what these crews do: attack wildfires by way of helicopter.

The Humboldt-Toiyabe National Forest employs one such crew, Bridgeport Helitack.

HISTORY TAKES FLIGHT

The long relationship between wildland fire and helicopters began shortly after World War II, though Forest managers were contemplating the idea earlier, there simply wasn't a surplus of helicopters as everything was going to the military.

Post-war, interest from fire supervisors continued to grow as they recognized the value of being able to move personnel more rapidly, as well as provide an informative, birds-eye view of the fire.

Two years after the war ended, in 1947, the US Forest Service contracted their first helicopter to fight fires on the Angeles National Forest.

The Humboldt-Toiyabe National Forest followed suit with the helicopter/helitack program, but it was much later in 1965 on what was then the Alpine Ranger District of the Toiyabe National Forest. In 1975, an interagency helitack crew was formed between the Toiyabe National Forest and Bakersfield Bureau of Land Management, believed to be the first interagency helitack crew in the United States.

The Humboldt and Toiyabe National Forests merged as one forest in 1984. As part of that forest, Bridgeport started the Rappel Program that was suspended in 2010 as a result of the re-organization of the National Rappel Program. The Bridgeport Helitack program remained and has continued to serve the Humboldt-Toiyabe National Forest ever since.



PHOTO COURTESY OF BRIDGEPORT HELITACK

IT'S ALL ABOUT PERSPECTIVE

As a firefighting resource, Bridgeport helitack is both the eyes in the sky and the boots on the ground, simultaneously. When a fire is initially reported, one of the first resources likely to respond is the helicopter and crew, who provide an assessment of the fire from the air before landing and unloading firefighters to begin suppression operations. The firefighters on the ground then use the helicopter for support, generally with water drops. Rapid initial attack is key, and often the reason why fires don't grow nearly as large as they have the potential to.

This initial attack capability makes helitack unique among the various other firefighting resources. Because the helicopter is the fastest mode of transportation that firefighters can utilize, helitack crews can find themselves working on multiple fires a day, knocking down one before leaving to another. This isn't generally the case for other resources such as engines or handcrews, as once they are on a fire, they are usually committed to that incident until it is fully extinguished.

The mobility and speed that the helicopter provides make it especially valuable to the Humboldt-Toiyabe, the largest forest in the lower 48 states. At 6.3 million acres, the forest spans the entire state of Nevada as well as portions of eastern California. The helicopter (and crew) can respond from Minden, Nevada to a fire in central Nevada, for example, and still beat any other closer ground resource, making it a very important and regularly deployed resource.

THE HELICOPTER

Unlike other firefighting agencies, the helicopter itself is not government owned. The US Forest Service contracts small businesses who bid to obtain an agreement, which is guaranteed for one year but can be extended up to four. The current helicopter attached to the helitack program is a Bell 407 HP Eagle, a high-performance type 3 helicopter that is well suited to initial and extended attack fire suppression in steep, mountainous terrain and high elevations. It is capable of transporting an initial attack load of four firefighters. Other missions include bucket work, transporting cargo, observing and directing firefighting activities, and when medical emergencies arise, transporting injured firefighters from the fire to emergency medical facilities. This particular helicopter is very fuel efficient and capable of more than three hours of flight time on a single fuel cycle. When combined with its maximum cruise speed of 140 knots, it has an impressive initial attack response range.

The helicopter pilot, mechanic and fuel truck come as part of the contract, and quickly become part of the crew family. The pilot must rely on the firefighters on the ground to give clear, concise instructions and notify him/her of any hazards in the area, along with vital information such as wind speeds and direction. Like most things in fire management, teamwork is crucial to a successful and safe operation.



PHOTOS COURTESY OF BRIDGEPORT HELITACK

CHASING FIRE

Members of the helitack crew rotate daily from being on what is called the “IA load”, or initial attack load, that flies inside the helicopter or on the day’s road crew which responds behind in a chase truck. The road crew will find a location near the fire where the helicopter’s fuel truck can safely access and set up to be able to refuel as necessary. This also serves as the location for the helicopter to base out of for the remainder of the time they are working on that fire. A helicopter mechanic accompanies the group, and this is also where they will do any of the various maintenance that the helicopter requires.

HELIBASE

You may have been driving down the highway before and noticed several helicopters grouped together in a field with a sign that says, “Helibase”. This is the larger scale version of what the road crew sets up during initial attack and where all the helicopters for that particular fire are parked, serviced, and refueled. Sometimes they are located near the Incident Command Post, so that supplies and personnel can be ferried to the helibase in a timely manner. More remote helibases can also be established to maximize efficiency with a shorter turnaround time, as well as reduce flight costs.

THE CREW

Of course, the helicopter does not work alone. Its value not only lies in the speed, mobility and effectiveness of the apparatus, but also in the crew inside. The Bridgeport Helitack crew is made up of eight permanent and seven temporary seasonal employees, who are brought on for the summer months when fire season is in full swing. In order to supplement their force, helitack leadership can order additional firefighters for assignments throughout fire season, but the core characters remain the same.

SKILLS AND TRAINING

Helicopter crewmembers must master a wide range of skills including general fire suppression tactics such as building fireline in steep, difficult terrain using chainsaws and hand tools, performing firing operations or felling hazardous trees. Unlike other firefighters, however, they also have the added complexity of working in and around the aircraft. They must be proficient in utilizing the correct procedures for boarding and exiting a running helicopter, safely connecting cargo loads and water dropping buckets with cable releases, carefully arranging loads so they are balanced in the cargo nets, making a variety of critical load calculations and flight manifests, identifying and communicating hazards to the pilot, constructing helicopter landing areas, and knowing emergency crash rescue procedures.

Perhaps not surprisingly, these skills require extra training that other wildland firefighters are not required to take, including air operation classes and proficiency drills with the helicopter. Unlike all other firefighting modules, at least one full fire season of experience is required before being able to even apply for a temporary position with helitack. To apply for a permanent position, it is required to be fully qualified helicopter crew member.

Unique to Bridgeport Helitack is their operational qualification depth, meaning that crew members have a considerable amount of experience and qualifications when compared to their small number of permanent employees. This gives them the ability to respond to a fire with not only the suppression capability that the helicopter can provide, but members of the crew can then take on leadership roles within the Incident Command structure of the fire itself. This versatility comes from a continual investment in the professional development and training of every crew member, something that the program emphasizes and takes pride in.



FITNESS

Another important investment for the helitack program is physical fitness. All firefighters must pass an arduous “pack test”, where they must walk three miles carrying forty-five pounds of weight in under forty-five minutes to become an employee. After that, the physical fitness program varies from crew to crew, but requires daily strenuous activity. For Bridgeport, this includes long runs, steep hikes and calisthenics. Being physically fit is necessary to be able to perform the duties of the job successfully and maintaining readiness for any new wildfire.

A DAY IN THE LIFE

Each morning, the crew gathers together to receive a briefing, which includes their respective assignments for the day. Depending on the year, the crew may be staffing multiple helicopters, such as the additional two helicopters that are part of a national response for the 2020 fire season. Each helicopter is assigned an initial attack flight crew, a road crew, and a helicopter manager. Having the day’s plan, the crew will then head out on the day’s “PT”, or physical training. The rest of the day might be spent doing training on various aspects of wildfire operations or performing proficiency drills with the helicopter, which are timed for maximum efficiency.

If the helicopter is dispatched to a fire for initial attack, the flight crew will quickly load up into the helicopter and fly to the fire. Once on scene, they will perform size up, or an assessment, of that fire to dispatch over the radio and find a safe place to land. From there, if they are able to identify a close enough water source, the crew will hook up what is known as a Bambi bucket to the helicopter and it will start performing water drops on the fire to cool it down, while the crew hikes in and begins suppression operations on the ground.

Bambi buckets vary in size and water carrying capacity, ranging anywhere from 72 to 2,600 gallons. Bridgeport uses a collapsible Bambi bucket ranging from 144 to 210 gallons that they stow in a basket that hangs on the side of the helicopter. The crew determines which bucket to use based on the day’s temperature and the altitude of the area they are working.

It is important that firefighters on the ground are communicating with the pilot, because the weight of 210 gallons in a single water drop could be compared to the weight of a large cow, not something that anyone would want to stand directly underneath. The pilot controls the bucket’s water release from inside the cockpit. Once a drop has been made, the helicopter will then return to the water source, hover above it to refill, and return.



Each fire is unique, and tactics will vary depending on the situation. If there is no nearby water source, the helicopter can help in other ways, such as being used to shuttle in additional firefighters. It can also provide logistical support, bringing cargo to the fire. Often, after lighting has rolled through an area, helicopters are used to perform reconnaissance flights—as the best way to spot a remote fire is from the air.

Bridgeport Helitack sees multiple different areas of the country per season, and they can stay on a fire for fourteen to twenty-one days after which they swap out employees to provide two days off. Any given day can be spent anywhere in the country, dictated by the severity of the fire season and the need for aircraft support.

The demanding nature of a job as a wildland firefighter keeps people away from home and their families for weeks at a time during the summer season. In that sense, many fire crews tend to have a strong family dynamic, and Bridgeport is no exception. You can often find them having barbecues or spending time together even in their off hours. Memories made on the fireline are not quickly forgotten, and the diverse opportunities paired with the excitement of working with a helicopter makes a job with helitack highly sought after and enjoyed by those who possess it.