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Front cover: Alaska practice jump—composite (Courtesy Mike McMillan)



Message from the President





by Bob McKean (Missoula '67) President

As YOU KNOW, the Boise reunion scheduled for June of 2020 was postponed until June of 2021 due to the COVID-19 pandemic. While unfortunate, postponement was clearly a prudent course of action given the circumstances.

As I write this, we are in the third week of a "stay-in-place" order in Oregon. Oregon has been reasonably fortunate thus far ranking well into the bottom 1/3 of states in numbers of infections and considerably lower in per capita rates of infection. Some good fortune allowed Portland (and Oregon) to avoid the fate of Seattle. And, good local and state leadership in shutting the state down early was a key factor as well. Unfortunately, medical professionals and scientists tell us we all have a long road in front of us with respect to this pandemic. I wish for all who read this good health.

The pandemic is also cause for concern for the health of

firefighters since they work in close proximity to one another during the fire season. My thoughts and prayers, as well as those of NSA Board members, are with active firefighters as they are with all front line workers and first responders during this time. Those of us who no longer work in those capacities owe much to those who do!

Recent editions of Smokejumper have included a number of articles related to the nature of fires as they have evolved in recent years especially given the increasing frequency of large, destructive mega fires both in the United States and around the world. In the April 2020, issue, Michael T. Rains article, "Wildfires and Global Warming: A Continuous Cycle of Destruction," is one example. In my "Message from the President" in that same issue. I discussed information I had found during my informal research of the topic.

This issue of *Smokejumper* includes several additional articles related in one way or another to the current wildfire situation:

"Aggressive Forest Management: Why Do We Avoid It?" by Michael T. Rains

"Managing Forests Properly Is The Key To Preserving These Treasures," by Fred Ebel (MSO-57)

"Wildfire Trends In The US and Adaptation Strategies To Increasing Wildfire," Tania Schoennagel, PhD, University of Colorado, Boulder

I am pleased that individuals with expertise are willing to share their thoughts about this important topic. As I have written before, *Smokejumper* is an excellent forum where informed opinions ought to be aired. Clearly, opinions will vary, but that is a good thing! No one has all the answers to the complex issues surrounding climate change, fires, wildland and forest management, initial attack, and related topics. It is important for you, our readers, to learn these complex issues from the perspective of those with expertise. Consequently, again I encourage others with professional expertise on these matters to consider weighing in. If you are thinking of doing so, please contact Chuck Sheley or me.

Some Odds and Ends

Bob Derry (MSO-43), the last of the legend-

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Smokejumper base abbreviations:

| AnchorageANC | Grangeville GAC | ReddingRDD |
|-------------------|-----------------|----------------------|
| BoiseNIFC | Idaho City IDC | RedmondRAC |
| Cave Junction CJ | La Grande LGD | West Yellowstone WYS |
| Fairbanks FBX | McCallMYC | Whitehorse Yukon YXY |
| Fort St. John YXJ | MissoulaMSO | Winthrop NCSB |

ary Derry brothers passed away in March. He fought in the Marshall Islands during WWII and was a fire chief in Douglas County, Washington, for 30 years. I remember visiting with Bob at the Missoula reunion in 2015 and was amazed by how fit he was!

Ed Lynn (MSO-95) and **Seth Alberts** (NIFC-12) were selected as this year's winners of the Al Dutton Leadership Award. Congratulations go to Seth. Ed's award has been granted posthumously. More will be written about these fine leaders in the near future.

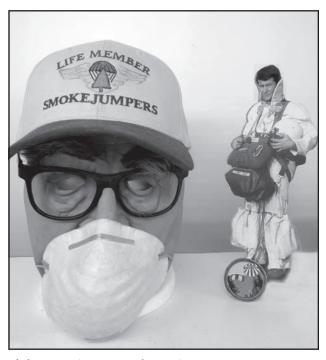
Bill Derr (Associate Member and NSA Board member) was published in *Wildfire News Today*. His article: "Let's Get Serious About How to Use Our Aerial Fire Fighting Fleet."

I want to offer my thanks to *Smokejumper* editor **Chuck Sheley** (CJ-59). His dedication to the NSA and tireless work on behalf of the NSA are remarkable!

National Smokejumper Reunion

June 4-6, 2021

Boise, Idaho



Sheltering In (Courtesy Mike Bina)



Notes from the Ranks





Pat McGunagle (West Yellowstone '19)

In MY CONTINUING dialogue with the esteemed members of the NSA, I've received questions on changes in equipment, rules, firefighting strategy, crew composition, pay scales—you name it. Well, it's the same fire triangle as ever, but several elements are indeed different.

As an example, many current jumpers are making a career out of smokejumping. Instead of the summer job to pay for school, or a brief intermission between careers, the hiring and retention mechanisms of the USFS/ BLM often encourage longer forays into this world of fire. It requires usually around five seasons of hotshotting and other fire seasonal work to be a candidate for Rookie Training. That much time in grade makes it seem not too difficult to stay in the fire world for the long haul.

Further, apprentice programs (essentially fast tracking to permanent positions) and

educational hiring boosts (for recent graduates and as student internships) allow the agencies to hire and retain more qualified individuals. The cost benefit of this is great: Training a smokejumper (around \$25k per rookie) is a risk should the jumper leave for a more lucrative district management position after just a season or two. The BLM leads the way in offering far more permanent positions to its rookies after their first season. The more cash strapped USFS has more seasonal temporary employees.

A 1039 temporary seasonal may work 1,039 hours (excluding overtime) for the appointment before being terminated. Usually a "going for it" hotshot season includes around 1100 hours of overtime, and by the time October rolls around, the crew is sitting at close to 900 hours on the 1039 balance. Jumpers are often shy of this number.

A "seasonal permanent" position guarantees either 13 pay periods of work and up to 13 pay periods off (referred to as a 13/13) or 18 pay periods of work and 8 pay periods off (the 18/8). A permanent full-time (PFT) position works year-round. Smokejumper bases have a handful of PFTs, a majority of 13/13s, and a handful of 1039s (more in the USFS than BLM). At

1039s, two dozen 13/13s, and several PFTs. In the BLM, there are a little over a dozen PFTs, ten dozen 13/13s, and a dozen 1039s (including rookies).

The main benefits of a permanent or permanent seasonal position are health care and retirement benefits. A majority of seasonal wildland firefighters take unemployment benefits in the offseason. This may seem out of character, but the job is unique, and our risk exposure is also unique. The particulate matter discussion is just now filtering down through all ranks of fire. Ineligible for health care but with the greatest exposure of all wildland firefighters, the low guys on the totem poles, those 1039s and budding 13/13s, should figure a way to prepare for potential health effects due to smoke inhalation. Direction from leadership is often "take what you are owed and invest it because you'll need it later."

A great investment vehicle for this is the Health Savings Account (HSA). These allow for up to \$3500 to be invested annually (as aggressively as you want) in conjunction with a High Deductible Healthcare Plan. For a low-risk, midtwenties, excellent-fitness wildland firefighter, an HDHP is a great alternative to costly government health care plans. As we smokejumpers like to

be low maintenance, paying into a program like this now can let us lower our burden on taxpayers later.

Usually the unemployment benefits are about \$3500 before taxes. The HSA funds can be withdrawn, similar to an IRA after age 65. There is likely a more perfect solution out there, but this is hard to beat for a temporary seasonal firefighter with a strong back and good knees.

So, what about those "permanent seasonal" positions? Does this let us retain knowledgeable individuals, thus helping train the new guys better? Does this make us fall into robotic rhythms, and thus squelch innovation? Maybe. The discussions in this magazine help keep us thinking and reflecting on ways to improve.

The fires don't really change. The old ways are tried and true, and the unseen acts of sawyering heroics and

parachute piloting are still a sweet something to share just between friends, because no one would understand you in "the real world" anyhow. But in terms of fire management, I see it to be an easy disconnect from those "old ways where we used to kill so many firefighters." With satellites, air attack, drones, and heat-seeking meat missiles (smokejumpers), why should we listen to those old guys in the back?

Well, yes, we did kill more firefighters back then, but we also were able to solve problems at their lowest level without too much red tape. The fireline officers of today are able to defer risk and accountability throughout the immense body of an incident management team, potentially missing the opportunity to make a hard, concrete decision that may define their career. Fire is the great equalizer to just about everything besides

government inertia.

An important change is the emphasis of talking about mental health. Wildland firefighters have disproportionately high suicide rates, though exact numbers are difficult to find. Many of our ranks are veterans from the wars in the Middle East. Stress events require us to be accountable to each other, and this discussion is often uncomfortable but necessary. The more of this burden we take off our shoulders before going home to loved ones, the less stressful that most important part of our lives will be. As more jumpers become career jumpers, this work—life balance—becomes a career task as well.

If you are interested in an aspect of modern smokejumping that I can perhaps address or seek out, please email me at patmcgunz@gmail.com

Thanks!

Part I: Canopies Over The Kandik

by Robert C. Betts (Redding '64)

Author's note: This article is being republished in tribute to David R. Pierce (RAC-65), 43 years after it originally appeared in Alaska magazine. It was largely due to Dave that the Kandik River jump happened. Dave passed away June 1, 2019, at age 75 after a long career as a smokejumper for both the U.S. Forest Service and the Bureau of Land Management, beginning in Redmond in 1965 and continuing through his years as an Alaska jumper during 1971-80. From 1980 until his retirement in 1998 Dave worked at the U.S. Forest Service Technology & Development Center (MTDC) in Missoula. He was an inspiration to us all. A more complete account of Dave's career appears in

the "Off the List" section of the October 2019 issue of Smokejumper.

ave Pierce pulled back from the open door of the jump ship and I moved into position, sitting with my feet sticking out in the slipstream. When we were directly over the drop zone, Dave slapped me hard on the shoulder; I leaned forward and pulled myself out the door.

I felt the sudden shock of my canopy opening and looked up to check the parachute. Below, in a clearing about 100 yards from the Kandik River, I could see the white cargo chutes where the three kayaks had landed. Jon Klingel's (CJ-65) orange-and-white canopy was already on the ground between the kayaks and the river.

To the southwest, the Kandik stretched away and disappeared in the mountains. I had a few seconds to enjoy the exhilaration of floating silently 1,000 feet above the river before having to concentrate on steering toward the jump spot. I'd made more



Bob Betts, Dave Pierce and Jon Klingel just prior to departing Fairbanks for the 1974 Kandik River jump. (Courtesy of J. Klingel)

than 50 wilderness parachute jumps in Alaska for the BLM, but this jump was different – there was no fire and no BLM helicopter to pull us out.

Sixty seconds after leaving the aircraft I hit the tundra. I sat up, released the parachute from my harness and let the wind take the canopy and deposit it neatly on the ground.

Checking the nearest kayak, I found it undamaged. By the time I'd looked it over, Jon came up and reported that the other kayaks were undamaged.

I heard the plane overhead and looked up. Our jump ship had gained altitude for Dave's jump and was over the drop zone at 4,000 feet.

Jon and I had both made static-line jumps but Dave, an experienced skydiver, would execute a delayed jump and pull. We watched him exit and drop away from the plane. He stabilized his body position and, after a 10-second delay, pulled the rip cord.

The tiny pilot chute pulled the main canopy out and suddenly he was hanging above us. The last rays of the sun reflected off his canopy giving it an orange glow in the twilight. By the time Dave was on the ground, we had just enough daylight left to haul our gear to a stand of white spruce on the riverbank and set up camp.

The trip had started taking form a month

earlier in Fairbanks at the BLM smokejumper base at Fort Wainwright when Dave, Jon and I began thinking about the feasibility of airdropping kayaks to an otherwise-inaccessible river, jumping in and kayaking out.

All of us were experienced Alaska smokejumpers, but the problems involved with dropping kayaks were something new. We would be on leave from the BLM and would not have the use of BLM aircraft or parachutes. Pulling the trip off would depend on finding parachutes, kayaks and a plane large enough to carry us for a price we could afford.

Eventually we focused on the Kandik River with its headwaters in the Yukon Territory and its confluence with the Yukon about halfway between Eagle and Circle City. As far as we could determine, due to its inaccessibility, the upper Kandik had never been floated.

Finding parachutes turned out to be easy because of Dave's association with the Fairbanks Skydiving Club. We were able to borrow all the necessary equipment in return for Dave doing repair work for the club.

The aircraft was a different story. It looked like the expense would be prohibitive. We required an aircraft with a removable jump door that was big enough to take us all in one trip. A DC-3 was going to cost about \$240 an hour and we needed four hours of flying time. Our spirits sank; we just couldn't put that much money into the trip.

We were sitting in the BLM dinning hall one late August afternoon. Lunch hour was almost over and among the few people still eating was Bob Schlaefli, a pilot and private aircraft contractor for BLM.

Dave went over and began outlining our plans and then asked about the possibility of renting his B-23, which was not under current contract to BLM. Bob smiled, took another gulp of coffee, and said, "Sure. Why not?"

Dave's eye's widened. "How much do you want an hour for it?" he asked.

"Aw, we'll take you out there and drop you off for the fun of it," Bob replied.

We couldn't believe it. The sleek red, yellow and white B-23 was already set up as a para-cargo and jump ship, in anticipation of a BLM contract that had not come through. It was just what we needed.

There were still some problems, however. To our knowledge, kayaks had never been airdropped, nor had any of us jumped from a B-23. In addition, the navigability of the upper Kandik was unknown. But Bob and his co-pilot Jim Dunlap were experienced smokejumper pilots; going out the door of the B-23 wouldn't be much different than a DC-3 exit.

Getting the kayaks rigged to be airdropped was a little tricky. We would be using Klepper folding kayaks. Each consisted of two packages – a long one, about the size of a golf club bag containing the frame, and a smaller bag contained the rubberized covering. These we placed inside sturdy cardboard boxes and then stuffed sleeping bags and clothing around them as padding before rigging them as para-cargo, using 24-foot cargo chutes.

There was always a chance a cargo chute would malfunction or that a kayak might be damaged on impact, so we knew we had to drop the kayaks first. If we lost one on the drop, one of us would have to stay behind.

Finally, there was the river. We would only be able to look it over once as we flew upstream. The final decision whether or not to jump wouldn't come until we were over the jump spot.

It was late afternoon in early September 1974 when we lifted off the runway in Fairbanks.

George "Pappy" Smith (IDC-62) accompanied us as loadmaster.

We banked and headed southeast toward the confluence of the Kandik and Yukon rivers. When we reached the mouth of the Kandik, Bob dropped the B-23 to 1,000 feet and flew upstream. Dave, Jon and I sat on our half-dozen boxes of gear and followed the flight path using a sectional chart, keeping our faces glued to the windows. From 1,000 feet the Kandik looked good – plenty of stretches of fast water, a few rocks to watch out for, but no apparent major obstacles.

The Kandik narrowed into a deep gorge, then widened again upstream. A few miles above this canyon, known as Johnson Gorge, we spotted a clearing next to the river and made the decision to jump.

The drop had been perfect and now we were sitting on the bank of the Kandik with colored bands of northern lights turning the night into a celestial light show. It had been a long day and as the campfire burned to glowing coals and the aurora faded, we turned in for a peaceful night's sleep.

The smell of fresh coffee and bacon drifted toward my sleeping bag. Jon was up first and had wasted no time getting the coffee pot on. It didn't take long for the smell of Jon's coffee to get Dave and me out of our sleeping bags.

We began assembling the kayaks after breakfast. It had been a last-minute scramble rounding up the three Kleppers. Jon already owned a double. Dave had found a used Klepper for a good price, but it was almost the deadline and I still did not have a kayak.

In desperation I called **John Culbertson** (FBX-69), an Alaska jumper temporarily detailed to California. I came right to the point and asked if he'd let me borrow the single-seat Klepper he'd left in Fairbanks.

"Bob, you know you can borrow the kayak," John replied.

"Well, John, I want to drop it out of a plane up on the Kandik," I told him. There was a moment's silence; then John said, "Oh, well – I guess you know what you're doing."

A National Wildfire Agency: Part II

By J. Jay Jones (Associate)

The Core Elements

Once upon a time when I was working at the Central Oregon Interagency Dispatch Center, one of our preseason meetings was attended by a senior official. An opportunity came about in the meeting for me to ask him about efforts toward centralizing wildfire into a single agency. I didn't really expect an answer and I was surprised when I actually got one. There had been efforts to create one, I was told, but these efforts had crashed on the shores of bureaucratic inertia. It didn't appear that there was enough support from a sufficient number of necessary people to push the idea through. For myself, I hold out hope that it is difficult to kill a good idea.

A National Wildfire Agency (NWA) may not be able organize itself overnight, but it will need direct command of several essential elements. The short list would be the national aviation resources, the incident management teams, the communication systems of personnel and telecomm networks, and logistic support systems of caches and warehousing facilities. Most of these elements would continue to operate out of their current duty stations as the NWA assumed operational control and command during its early, formative stages.

During its initial formation, the NWA would need to assume control of the Smokejumper Program, the Helicopter Attack Program, and the Airtanker Program—but in essence, *all* the tactical aviation elements. Naturally, you can't accomplish this without the associated ground support elements: technical specialists, contract specialists, facility managers, and ever-present logistics bean counters.

While Hotshot crews are not, strictly speaking, aviation resources, they remain national resources and are highly mobile because of the ease of employing air transport. It would be logical to consolidate them into the NWA in the early stages of its formation.

I'm sure some readers are already thinking

ahead and concluding that the real sticky wicket in this whole idea is snags on operating facilities. How are you going to separate the firefighters from their parent agencies and remain operational if you haven't accounted for operation facilities? When you come right down on that incon-



J. Jay Jones

venient point, it becomes a real rusty nail in the backside, doesn't it?

Take, for instance, the case of rolling stock fire engines, water tenders, et cetera. Engines and water tenders represent one of the largest percentages of capital expenditure in organized wildfire's budget. It's not feasible to air transport rolling stock, so you need a really comprehensive plan in organizing their distribution and supporting their operations. In fact, it wouldn't be cost effective to incorporate these elements into the NWA until these tactical units have a place to go—an operational facility to base them from. What does this mean? It means consolidating rolling stock into NWA might be ill advised initially. Why? Because, currently most of the operating facilities these units are based out of are often employed as shared facilities—the parent agency might still need to use them. Engine bays, oftentimes, aren't just used by fire personnel.

Facilities for aviation resources are another matter. For instance, before I left Las Vegas, Nevada, dispatch and helitack were combined into a joint facility at the North Las Vegas Airport. While at Minden, Nevada, the dispatch, helitack, and airtanker operations were at a joint facility. Again, at Prineville, Oregon, dispatch was next door to helitack at the airport. As anyone can tell you, it's a very convenient arrangement to have

aviation resources so close to dispatch. Joint-use, multi-purpose facilities are a good idea; they'll facilitate the consolidation of the NWA into a functioning agency.

Just as I don't see the NWA as necessarily needing to assume immediate control of rolling stock during the initial startup phase, I don't see the need to organize a consolidation proposal that requires a set deadline either. The key is to appropriate key elements into the NWA that can contribute the most, the fastest. Other tactical resources that lag behind the initial operational phase can be assimilated as the initial organization expands and acquires the capabilities to expand further. What matters is having the political will to chase this dream.

That issue brings us, quite naturally, into a discussion of another essential component of the NWA: the wildfire management teams. Realigning these teams into a cadre of Wildfire Incident Commanders won't be painless. This cadre needs to form a Council for Professional Standards comprised of in-house selection, promotion, and review boards for the management teams. The teams should be assigned to a Geographic Area Coordination Center and head up the training for that GACC. The Type 1 teams, being the senior management teams, should train, evaluate, and supervise not only the Type 2 teams, but all the available Type 3 incident commanders within that GACC's sphere of responsibility. It might be good to develop Type 3 short teams as another layer of training and evaluation. In essence, every GACC would form a stand-alone fire brigade.

There's a lot to be said about bringing an entire company of people along together. When I worked on the Plumas National Forest, all six districts would have the district hand crews, the engine companies, the Hotshot crew, and helitack crew train together for a weekend. By the time the training competitions were completed, the entire corps of fire fighters for the forest would know who they were working with, and it went a long way in eliminating miscommunications and raising unit standards. Management teams should do the same. It would make for a more close-knit organization. In-house management of potential problem areas in pre-season training can go a long ways in mitigating threats of litigation.

Okay, I admit I have issues with lawyers and accountants trying to run field operations. But a strategy to deflect litigation needs to be developed that satisfies elected officials that the tools are in place to self-regulate the NWA. A cadre of Wildfire Incident Commanders could accomplish two objectives. The first would be to reorganize the industry to be self-policing and to deflect, or at least blunt, reactionary attacks from uninformed sources determined to interfere with the process of investigating an incident that needs a referee. Securing complete control of the NWA in-house review is essential to alleviate the political abandonment of agency personnel to scapegoat litigation. The second objective is to bind the management teams into a more tight-knit community through training and advancement incentives. Organizing management teams into brigades at the GACC level would maintain a clear unity on policy and help ensure the standardization of training.

The top slots in senior management should be time-limited billets. A rota of billets allows personnel rising through the ranks to have continuing opportunities for advancement. It also prevents entrenched interests from maintaining a stranglehold on the organization and limits the terminal effects of nepotism.

Part of a management team's authority as command area leaders comes from being visible. They should be faculty in the training regimen so that subordinates can get the straight scoop right from the horse's mouth, so to speak. While I have nothing against technology, per se, communicating face-to-face is far superior to using emails, phone calls, and web-based training modules in evaluating people's competency, capabilities, and psychological maturity. It's negligent, in fact, to avoid personal contact for evaluation purposes since the question usually arises: "Who signed off on this idiot, anyway?" Face-to-face encounters ensure that promotions, demotions, and reviews aren't just test score related, but have input from personal insights.

Another concern requires a little backstory. My editor sent me a couple of files on *Work Force Capacity* of the US Forest Service that brought up some interesting points. In the subsection of *Synopsis of Interviews from Nine Regions*, a few points

of concern caught my attention. I paraphrase:

- Increasingly, the "process" appears more important than meeting goals.
- Centralized services unresponsive to field personnel.
- Responding to national data requests trumping fieldwork.

An example out of my past is the consolidation of personnel management in a centralized facility in Albuquerque. One winter I stopped in at the Siuslaw N.F. Supervisor's Office in Corvallis, Oregon, looking for work and was hoping to get a leg up on the coming fire season. I couldn't get any information because the personnel office was gone. My contact there lamented that with the local personnel office gone, quick answers didn't happen, phone queries took too long, and you often didn't get the right person or the right answer to personnel issues. Other contacts at the rat warren in the Albuquerque facility complained that morale was down for the same reason. This reminds me of why the military opted for creating organic units of close fire support for combat units—e.g., Marine pilots flying close support aircraft for Marine assault groups. In an emergency, you like to know you can depend on your support. So, centralization might look good on paper, but is often another matter where the rubber meets the road.

This is why good communications and efficient logistics are so important to firefighters. Management personnel should all have their ticket punched in a dispatch center, a fire cache, or a warehouse so they not only understand the processes, but get to know the personnel who work there, as well. Competent logistics is what makes operations so efficient. Professional development requires cross-training. Experience in communications and logistics will help craft good firefighters into greater incident commanders.

Facing The Judge

UNLIKE SOME POLITICAL pundits who like to stick their head in the sand, I believe global warming is an established fact and that it's responsible for our extended fire seasons. I've watched fire seasons grow over the last twenty-five years from ninety days to one hundred eighty days at many fire sta-

tions. Many of my colleagues have argued that it's worse than that; that it's now necessary to staff fire crews year-round in many locations and others speculate that there's a high possibility that global warming is increasing the occurrence of extreme fire behavior. Under this scenario, incident commanders facing increasing risks are also facing increasing litigation. Political pundits—seeking to further political agendas—don't care that litigation is bad for wildfire command or bad for firefighter morale. They are willing to sacrifice long-term national interests for a short-term tactical advantage in achieving a political goal of a personal nature. Firefighters need to close ranks to face these challenges.

What makes this litigation so disheartening is that it's inherently unethical. Our firefighters, who risk their lives trying to save other people's lives and their property, are being sued for attempting to do the right thing. This *should* boggle your mind.

Firefighters are combating the forces of nature and they don't have Godlike powers over the weather or the fickle caprices of the fire demon. If an agency has the mandate and duty to perform a service for its country, the country should make the effort to stand by its agency

In the face of this, I believe that a National Wildfire Agency should assume the responsibility for investigating its own wildfires with its own in-house audit system. This would require a Type I team from a different GACC with specialized training to perform the audit investigation under the glare of public scrutiny and using full transparency. This won't be a simple task, but it is preferable to the self-destruction of the wildfire industry by rampant litigation that will pit members of Type 1 and Type 2 teams against each other in the courtroom. That path leads toward defeat in detail. An audit system, in combination with a Professional Review Board, should effectively self-police the NWA and help defend it against its detractors.

My next article will dive into the two major components of NWA: the divisions of telecommunications and logistics. This includes personnel, facilities, capitalized equipment, and a discussion of their contributions and drawbacks.

SMOKEJUMPERS AND RAPPELERS IN RUSSIA

by Andrey Eritsov - translated by Bruce Ford (Missoula '75)

Editor's note: Andrey Eritsov is the deputy director of the Aerial Forest Fire Center of the Federal Forestry Agency of Russia. He has served there since 1991 as a smokejumper (making 73 fire jumps, including three fire jumps made in Alaska, Utah, and Arizona in 2001); as senior instructor of a smokejumper base, as aerial fire manager and aerial subdivision chief for the West Ural Regional Aerial Fire Center; and as deputy director of the Aerial Forest Fire Center of Russia. Eritsov is a skydiver and has more than 1,600 parachute jumps.

He worked for the World Bank project "Sustainable Development in Forestry" as a fire management consultant for pilot regions in Russia.

Eritsov participated in initial attack and extended firefighting operations in the U.S. with both smokejumpers and hotshot crews, under exchange programs between the U.S. Forest Service, Bureau of Land Management, and the Federal Forestry Agency of Russia.

The use of smokejumpers in Russia stemmed from parachuting developments in the early 20th century. July 7, 1931, is considered the starting date for aerial forest fire protection in this, the most-forested country on Earth.

On that day, the first experimental flight was undertaken in a small, two-seat PO-2 airplane from the Uren aerodrome in the Nizhnegorodsky region. At that time, a group including forestry specialists, fire scientists, pilots, and technical personnel had been sent there with the goal of testing the use of aviation for detecting forest fires in remote regions.

From July 7 through Aug. 14, the PO-2 flew 40 hours and detected 14 fires. Thereafter, bases for aerial forest patrol were established in many regions of the young Soviet Union.

One active participant in these experimental flights and

in the establishment of forest fire aviation was an academic from the Leningrad Forestry Institute, Giorgy Mokeev. He immediately proposed using parachutes to quickly deliver firefighters to new fires.

At that time, Mokeev had no parachuting experience. To bring his idea to life, he applied to the Osaviakhima aviation club to undergo parachute training and completed several jumps.

It must be said that it was not easy for him to bring this idea to fruition, as many were opposed to the proposal. Indeed, parachuting was still newly developing, and this would require not just jumping into fields, but to fires burning in forests.

Nevertheless, the leadership of the institute agreed to an experiment. Mokeev and his colleague, I.Z. Levin, jumped two small forest fires in the Nizhnegorodsk area June 19, 1936. For these jumps, they had to climb out and stand on the wing of the PO-2.

The experiment showed that the idea of using parachutes in suppressing remotely accessible



Andrey Eritsov



Jumpers training to jump from the second seat via the wing, and directly from the third seat. Northern Airbase, Archangel, 1950. (Courtesy Valery Korotkov)

forest fires, which many had considered a crazy fantasy, was indeed viable in practice.

Mokeev trained as a jump instructor and started to train the first parachuting firefighters, or as they came to be termed, "avia-firemen."

For the first course in 1936 at Krasnoborsk, Mokeev prepared 18 people, including two women, M.G. Tykina and K.F. Obrucheva (later Muzhinskaya). In the forests of Archangelsk and Vologodsky regions, smokejumpers participated in fighting 82 fires in 1937, extinguishing a total area of approximately 37,000 acres and completing 425 jumps.

Soon, the All-Union Forest Aviation Trust was established. Mokeev headed the trust's laboratory and for more than 10 years directed all work on updating fire suppression technology employing smokejumpers.

The experiments pleased the leadership of the institute, and smokejumper bases were subsequently set up all over. In those years, the PD-6 and D-1 parachute systems were adopted. It was necessary to pick a suitable jump spot and precise exit point from the aircraft.

Due to the lack of a widespread radio-communication network, jumpers were also dropped to nearby populated areas for mobilization of local forest workers and citizens to fight fires. The jumpers, knowing the location and direction to the fires, would arrive with considerable resources.

The number of smokejumpers increased steadily. Develop-

ment of helicopters in the 1950s led to the new profession of rappelers, who arrived at fires by helicopter and used ropes and descent devices to reach areas lacking suitable nearby landing areas. Smokejumpers also trained as heli-rappelers and thus became versatile specialists, while rappelers were transported only by helicopter.

Collectively, they came to be called the parachute-rappeller fire service, or PDPS. They participated in putting out more than 70 percent of forest fires each year, and by the 1980s numbered more than 8,000 members.

With the development of new technology, the PDPS adopted new parachutes and rappel descent devices. For many years, a drum-type descent device was used.

The SU-R post-type rappel descent device was adopted in 1978, and is used in many regions even now.

However, trials were conducted in 2015 with a completely new descent device, the Kashevnika KSK. In many aspects, including safety, it exceeded performance of the SUR, and is now being widely adopted.

Non-steerable parachutes had been replaced by the 1950s with the steering-slotted, 743-square-foot PD-47, the 753-square-foot PTL-72, and the 624-square-foot Lesnik. The Lesnik-2, a 285-square-foot, seven-cell ram-air chute, appeared in the 1980s and al-

lowed very accurate jump spot landings. The Lesnik-2 was used with a 3-5 Series-4 chestmounted round reserve.

The Lesnik-2 was replaced in the 2000s with the nine-cell ram-air Lesnik-3, which exceeded previous systems in wing characteristics and gave greater horizontal speed of 24.6 mph, as compared to 20 mph for the Lesnik-2.

However, when jumping into small spots in low-wind conditions, it retains high forward speed and several landing injuries have resulted. The Lesnik-3 system utilizes identical canopies for the main and reserve, packed in the same backpack container.

In recent years, there have

been two fatalities resulting from drogue-in-tow malfunctions, as well as other serious jump-related injuries. Consequently, the Aerial Fire Protection Service is constantly studying new types of parachute systems.

Trials are being conducted with the newly purchased, new generation 310-square-foot, seven-cell ram-air Combat parachute system which is set up for static line deployment. The Alpha-Combat is packed in a backpack container with a ZOOM-190 reserve.

Study of other parachute systems is ongoing. In the meantime, new jumpers continue to train on the round PTL-72 system.



Jumper preparing to jump from wing of Po-2. Northern Airbase, Archangel, 1950. (Courtesy Valery Korotkov)

Managing Forests Properly Is The Key To Preserving These Treasures

by Fred Ebel (Missoula '57)

have reflected on the challenge made by **Bob** McKean (MSO-67) in the July 2019 issue of *Smokejumper* to address the questions of forest management and the responsibility of those involved. Here are some of my thoughts.

First, climate change is outside of my expertise. However, anthropogenic global warming is a highly politicized and scientifically complex issue that still requires debate. Frankly, given the strategic importance of our nation's energy sector, I suspect any mitigation efforts will have wide-reaching economic and political ramifications.

A salient point: A well-managed forest can help mitigate effects of global warming, particularly in fast-growing stands.

To improve forest resilience, reducing fire intensity and the rate of spread is easy to apply and achieve in practice. It means actively managing a forest through thinning, logging and prescribed fire. However, this is difficult to implement on national forest lands. Public and legislative efforts default to nature's way and thwart any activities that would promote *resilience* and *healthy* tree stands on the national forest.

Land allocations limit options on national forest land. "Wilderness" and "Roadless" designations crimp fire control on national forests and create a dilemma when controlling wildfire.

Complex forest-planning rules limit managers in pursuing forest-management options. The agency managers have been conditioned to steer away from active forest management because of lawsuits and endless appeals of forest-management activities.

Case in point: This morning's newspaper carried a story about a landscape restoration project on the Payette N.F. A lawsuit was filed by the Alliance for the Wild Rockies, even though the project was approved by a local forest coalition which included environmentalists. This is an example of interference and interruption of Forest

Service activities.

Check out the four board members of the Alliance. You will find an Arizona congressman, former President Jimmy Carter and two Hollywood entertainers. Do you really think they are knowledgeable or even interested in the project on the Payette Forest?

How do we get forest management back in the forest? It will take executive, legislative, and judicial action plus agency buy-in.

This effort starts at the very top of our government. The president and Congress must revise legislation which thwarts action on the ground. They must, through legislation, encourage forest management and put sideboards on the lawsuit-andappeal process. These changes must give greater weight to the local communities most affected by forest management.

The key person in this scenario is the Chief of the Forest Service. The Chief must give the president and Congress a cogent rationale for changing and upgrading regulations. The Chief must also convince Forest Service employees of the efficacy of forest management to improve forest health and protection.

This will not be an easy task given the current culture of the Forest Service and past decisions. The consent decree changed the Forest Service internally by advancing categories of people without on-the-ground experience.

Another significant decision was the elimination of forest offices in our small rural communities. The decision to consolidate ranger districts was a huge mistake in community relations.

When district offices in small rural communities were closed, it disconnected these communities from Forest Service personnel, but more important, it disconnected the Forest Service staff from these communities. The budget savings from consolidation will never repair the continuity of relationships developed over the 70

years before consolidation.

Overcoming complex allocations, regulations, lawsuits and appeals, plus a cultural shift in the workforce, will not happen quickly. This process, even with the proper motivations of the players, will take decades to achieve.

In the early Forest Service, fire protection was a priority of all the district personnel. Everyone was expected to fight fire and had firefighting experience, or was gaining it. This is no longer true. The Forest Service now has a special cadre of firefighters to quell fires, which disconnects these employees from the critical responsibility of management.

Foresters identify three basic issues with fire: weather, topography and fuels. Weather and topography are not controllable, but fuel loads are. This requires aggressive use of thinning and logging plus prescribed fire. I see no aggressive use of thinning or prescribed fire locally.

In terms of firefighting, rapid initial attack must still be the priority. This is where smoke-jumpers are most effective. There are always risks fighting fires but that should not diminish initial attack. We must act quickly, putting the necessary resources on the fire.

Overstaffing is cheaper fighting a small fire than a project fire in the middle of nowhere. From my experience, hitting a two-manner when it is small and controllable is good business. Smokejumpers are efficient firefighters and perfect for this job.

My concern today is that the upper-level staff of the Forest Service comprises individuals who may never understand or accept the direction provided in the 1897 Organic Act to manage the national forest for the resources of water and timber. If I could suggest a document to be read and studied by Chief Christiansen, it would be *The Use of the National Forests* by Gifford Pinchot published in 1907.

Perhaps the last paragraph on page 7 of Pinchot's direction is as instructive today as it was in 1907:

"At the start there was much opposition to (designation of) the Forests. Often this opposi-

tion was just; for although Congress had set apart the lands and their resource, it has made no provision for their use or their protection. The timber was simply locked up and let to burn. This mistake was remedied in 1897, when a law was passed which made it possible to use all the resources and give them suitable protection."

This law, the 1897 Organic Act, is still in full force and effect having never been repealed by Congress. It is an active directive to Forest Service management.

Fire protection and active forest management is a very real and present issue today, just as it was in the early 1900s. For decades, the Forest Service was on the right track, but in recent years jumped the rails and is unwilling to confront the issues it faces today.

I selected forestry as a career because of the Forest Service. It had a great reputation and, from my perspective, wore a white hat. That was in the 1950s.

While attending college, I worked summers for the Forest Service as a lookout, smokejumper, and timber management aide. Many of my classmates and friends were career Forest Service employees.

My forestry career path changed after I completed my military obligation. But for 40 years, I interfaced with Forest Service staff as a purchaser's rep for timber sales and a reviewer of forest plans and environmental impact statements on five national forests.

I witnessed the evolution of the Forest Service from a male-dominated agency to a more diverse workforce and the consolidation of ranger districts. I lived in communities affected by these changes and watched as workforce changes and consolidation made a significant difference to Forest Service operations and community relations.

Aggressive Forest Management: Why Do We Avoid It?



by Michael T. Rains (Associate)

I AM A forester by training, so I have a bias toward forest management. That is, toward keeping America's forests healthy, sustainable, and more resilient to disturbances like insect and disease outbreaks and wildfires through aggressive actions.

Currently, there is a lack of forest management across our country. Our forests are in decline. From the rural to urban land gradient, this affects all of us. It does not have to be this way.

Recently, I was reading "Print and Paper Myths and Facts" from *Two Sides North America, Inc.* A quote caught my eye: "... Avoiding the use of wood is not the way to protect forests for the long term. It is precisely the areas of the world that consume the least wood that continue to experience the greatest forest loss."

During the past few years, I have written extensively about the lack of forest management

in our country, specifically as it affects the high-impact, terribly destructive wildfire situation with which we have been confronted during the last two decades. My notion is: "... aggressive forest management will help ensure effective fire management" and eventually the large, high-intensity wildfires we are experiencing now will subside and become again a tool for landscape scale conservation.

To date, most of my words have had little effect at influencing change. I am not sure exactly why. People seem to be entranced or simply do not care. Have we become so divisive that removing any vegetation from our forests and woodlands causes what former Forest Chief Jack Ward Thomas described as "gladiators form and fights ensue"?

Well-managed forests that provide goods and service and slow the ravages of wildfires is *the* conservation issue of our time. Surely there must be some common ground.

Thus, I began to look at the issue perhaps more pragmatically: the use of wood. Americans like to use wood and enjoy its benefits – housing, furniture, paper products, its carbon-positive nature, low energy production, and that fact it's renewable and can be easily recycled. And, most of it comes from America's forests.

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We each use about 53 cubic feet of wood and wood products each year. That's about two times more than the global individual average! So, if we like wood so much, why do we seem to avoid ensuring a sustainable supply through aggressive forest management?

It does seem like a paradox. Maybe most people do not know where their wood comes from. And as long as it does not come from "my forest," then that's okay. But it does come from "your forest."

Across our country, there is a total inventory of about 1 trillion cubic feet of wood. According to a recent publication on Forest Resources of the United States by Oswalt, et al., that's enough wood to "... fill the Great Pyramid of Giza 12,000 times." That's huge from a standpoint of helping mitigate the impacts of a changing climate.

And, about 26 billion cubic feet of new wood is produced each year from forests and woodlands in the United States. Offsetting amounts for exports and imports, we essentially use each year about one-half what is produced from our forested lands. This in itself has created a problem: our forests are getting clogged up.

For example, there are more trees now than 100 years ago. Forests, which include more than just trees – i.e., the chap-

arral forests of Southern California – are getting stressed, are dying, and are becoming a tinderbox for fire. And, once a fire gets a foothold, they become destructive behemoths that destroy everything in their paths.

Nationally, we consume about 17 billion cubic feet of wood each year, including the offset of exports and imports; about 13 billion cubic feet from just America's forests and woodlands.

According to reliable sources, projections indicate demand for wood and wood products - for example, lumber, plywood, pulpwood and advanced composites - in our country will be 24.3 billion cubic feet in 2030; 27.5 billion cubic feet by 2050. That's close to the current annual growth - about 26 billion cubic feet - to ensure a sustainable proposition, assuming net annual growth remains constant. Simply put, more wood can and should be harvested from our forestlands.

Approximately one-quarter of the lumber used in the United States last year was imported. About 80 percent came from Canada. While I am all for free trade, if more of America's forests were aggressively managed, there would be a much better balance in domestic production and use and imports, especially for the more conventional wood products such as lumber for construction.

For reference, an averagesize house uses about 1,400 cubic feet of wood. And, commercial construction using wood is on the rise.

Who controls the management of our forests? About eight percent of the world's forests are in the United States, and this is split into three ownership categories: federal (30 percent), state and local (10 percent) and private (60 percent). About 67 percent of all the forestlands have an objective to produce wood.

According to a Forest Resources Report of the United States, "... about 55 percent of the volume of growing stock and half the volume of sawtimber is in private ownership. In the eastern states, about 90 percent of the timber volume is on private land; in western states, by contrast, only 40 percent of the timber volume is in private ownership. More than 90 percent of the growing stock on western public lands is on national forest or other areas managed by the national government."

This last statement is telling. There was a time when I was with the U.S. Forest Service when the timber harvest level from the national forests was about 12 billion board feet or about 3 billion cubic feet. Now, it is about 3 billion board feet, or about 0.25 billion cubic feet. That's about 2 percent of the nation's total production level, from a high of about 12 percent in the late 1970s. About 20 percent of America's forests are designated national forests.

Clearly, if there were a will – from a sustainability point of view – the national forests

could easily increase their contribution of wood and wood products. And, as a result the forests in the west – which are especially vulnerable to large, intense wildfires – could become much more resilient.

Simply put, we reverse the current trend of "lack of management" to "aggressive management" to help protect lives, property and communities. And, produce more wood and wood products for a growing America.

To me, "aggressive forest management" can easily be translated, for example, into an annual wood removal program on the National Forests of 0.75 billion cubic feet – 9 billion board feet – three times the current level.

Yes, this will take additional resources and infrastructure, but it's well within the range of sustainable vegetative management and will help increase the flow of wood and wood products to meet projected demands.

Let me go back to that opening quote: "... Avoiding the use of wood is not the way to protect forests for the long term ..." Healthy, sustainable, resilient forests make our lives better. They protect us. They nourish us and provide comfort. They improve *our* health.

The current decline of our forests does not have to be. We owe it to ourselves and future generations to band together and do all we can to enable our lands to be more fulfilling to everyone and everything that depends on them.

References available on request.

Wildfire Trends In The US and Adaptation Strategies To Increasing Wildfire

Tania Schoennagel, PhD

t's now mid-summer, and likely an active fire season is underway, yet I am writing this back in April amidst stay-at-home orders in numerous states across the US. While I don't yet know the future trajectory of COVID-19, I do know that if it is a hot and dry summer, the West will be experiencing an active fire season. As smokejumpers work heroically to extinguish remote wildland fire starts, we all search—yet again—for answers to why is so much area burning, and how can we better manage the growing threat of wildfires?

I am a fire ecologist at the University of Colorado, and I have spent 25 years researching wildfires and their effects across the West. I also examine trends in US wildfires and evaluate efforts to manage them and have testified in Congress and the Colorado legislature on these issues. Through my research, and that of many colleagues, and from listening to firefighters, land managers and varied stakeholders, I have grappled a lot with these issues, and I have some answers to these burning questions.

Is climate change affecting wildfires?

Yes, a large body of research shows us that warmer, drier conditions are associated with increased area burned in the US in recent decades, primarily in the West. Since the late 1970s, the US annual average temperature has risen almost 2 degrees Fahrenheit¹. In the western US, this warming has led to more aridity, earlier snowmelt² making higher-elevation forests more flammable, and fire seasons three months longer on average³.

As a consequence of this warming, annual area burned in the US has risen significantly, with a big uptick since 2000⁴. The ten largest fire years since 1960 have all occurred in the last 20 years. In the western US. area burned by wildfires larger than 1000 acres has grown by over 350% across all ecoregions and by an astounding 1300% in forests (1984-

2017)⁵⁻⁷. A careful study revealed that human-caused climate change was responsible for almost doubling the area burned in western US forests from 1984 to 2015⁸. Of the total area burned in US since 2002, 55% was in the conterminous western states (80% including Alaska)⁴. So, the rise in area burned in the US in response to warming largely reflects increased burning in the fire-prone West.

Are human-caused ignitions a big deal?

Yes, human-caused ignitions (campfires, powerlines, fireworks, equipment use, etc.) now play a big role in starting wildfires, accounting for 84% of all wildfire starts and 44% of area burned across the US 1992-20129. Within the wildland-urban interface (WUI), where homes abut or intermix with fire-prone vegetation, almost all fires are started by humans. Warmer, drier conditions are making human-ignited wildfires more common throughout the US. Only in the interior West is lightning still the predominant ignition source of the largest 10% of fires; elsewhere in the US, human-caused ignitions have become the dominant source of wildfires¹⁰.

So, what actually burns?

In the Western states in an average year, some two-thirds of what burns is shrublands and grasslands, not forests¹¹. This comes as a big surprise to many people, as the topic of better wildfire management is often couched in terms of better forest management. However, *most of what burns in the West is non-forest*. If we look at the total area burned across the US, about 55% burns in the conterminous West, and only about 40% of what burns in the West is forests. Taken together, that means forests in the western lower 48 states account for less than a quarter of what burns across the US in an average year (55% x 40% = 22%). Our western

wildfire problem is not predominantly a forest fire problem, and therefore forest management alone cannot effectively solve it.

How severe are wildfires these days?

While area burned in the US has increased significantly in recent decades, wildfire severity has not. It comes as a surprise to many to learn that the majority (65%) of what burns across the US is low-severity fire. Only about one-third (35%) is moderate or high-severity fire, with no significant change over the past 30 years (1984-2014)12. In western forests, burn severity tends to be higher in larger fires and during extreme burning conditions, but these trends are not beating out the noise, and overall forest fire severity has not changed significantly over the past 30 years^{13, 14}. Where is forest fire severity high? In moister, more productive, higher elevation, and more northern forests, reflecting geographic patterns that promote higher fuel loads. Generally, these moister, cooler forests don't burn very often so remain a small slice of the wildfire pie, although that is changing as snowpack is melting earlier due to warming.

What is the role of fuels buildup?

I often hear people point to fuels buildup as the main reason for our big and growing wildfire problem. Indeed, fuels buildup has played a role. Forest fuels have accumulated due to decades of suppression of frequent low-severity fires characteristic of dry forests (for example, low-elevation ponderosa pine forests). Historically, frequent low-severity fires kept these forests of thick-barked, fire-resistant trees relatively open (forests that clearly fall in this category are roughly 1/3rd of western forests in the lower 48^{15,16}). Effective suppression of frequent fires has allowed smaller trees to fill in formerly open stands, increasing their density and making uncharacteristic high-severity fires more likely now.

But importantly, *fuels have not increased in all forests*. Many forests have not become denser over the previous century (roughly 1/3rd of western forests in the lower 48¹⁶). For example, high fuel-load forests described above, where you might ski or hike in the high country, typically experience infrequent, high-severity fires. These moister, cooler forests are as dense today as they were prior to fire suppression and haven't experienced significant fuel accumula-



Tania Schoennagel (Courtesy T. Schoennagel)

tion. High-severity fires, while scary to us, are business as usual for those forests and not a consequence of past fire suppression and fuels buildup¹⁷.

In sum, most of what burns each year is shrubland and grasslands, and only a portion of the forests that burn suffer from fuels buildup due to past fire suppression. Therefore, reducing uncharacteristic fuel loads can restore dry forests to pre-fire suppression conditions, but this alone will not significantly address the increasing wildfire problem in the West triggered in large part by climate change.

Can fuels management significantly reduce area burned?

Let's look beyond the issue of forest fuels buildup, and simply ask whether fuels reduction aka "wildfire mitigation," treatments in a variety of ecosystems could help reduce area burned in the US. The answer to this question may surprise you, which is an issue of both scale and odds of burning.

Wildfire mitigation treatments remove ladder fuels primarily through thinning and prescribed fire with the aim of reducing subsequent wildfire severity and spread. Treatments are not fire prevention tools, but rather are designed to mitigate subsequent fire behavior. Therefore, in order for wildfire mitigation treatments to work, they need to burn by wildfire during their period of efficacy, which may last roughly 10-20 years depending on site conditions.

Two studies have specifically looked at how often federal wildfire mitigation treatments encounter subsequent wildfire, as a high-level indicator of treatment effectiveness. The first, led by a team at the University of Montana, looked at federal wildfire mitigation treatments in all ecosystem types across the US from 1992-2012¹⁸. The second, led by my team at the University of Colorado, looked only at federal wildfire mitigation treatments in western forests from 2004-2014¹¹. Both studies found essentially the same answer: on average each year *less than 1% of wildfire mitigation treatments encountered subsequent wildfire*, meaning the vast majority of treatments miss the chance to do their job.

Forest treatments essentially burn at the rate that the forest itself burns, which is about 1% per year in western forests, and it's really hard to beat those odds. Treatments that had relatively high rates of subsequent burning (>2%) occurred in only three ecoregions across the US, all of which experience relatively high fire frequencies¹⁸. These are all in the West, but only one of them is forested: the ponderosa pine woodlands in the Mogollon Rim Ecoregion of Arizona.

So, wildfires burning fire mitigation treatments is a game of low odds, and the vast majority of treatments never get the opportunity to modify wildfire behavior because most never burn during their period of efficacy. As a consequence, treatments have very little leverage in changing wildfire behavior. In fact, only about 1% of the area burned each year burns in fire mitigation treatments. Even doubling or tripling our efforts will still yield fairly low treatment-wildfire encounter rates, and therefore, low impact on wildfire trends. More forest management, especially if it occurs in moister more productive forests that burn less frequently, will not slow increasing wildfire. Therefore, we need to be strategic about where and how we manage forests to have any measurable impacts on wildfire.

Prescribed fire

The National Cohesive Wildland Fire Management Strategy considers prescribed fire as the most cost-effective approach over the largest potential area of the US for reducing fire risk. Indeed, federal agencies implemented about 2.8 million acres per year

of prescribed burns from 1998 to 2018, and about half of the federal area treated for fire mitigation is prescribed fire. However, most prescribed fire in the US (70%) is implemented in the Southeast by non-federal agencies¹⁹. Meanwhile, prescribed fire has declined during the last 20 years in the West. There are important safety concerns with fires escaping prescriptions (although such occurrences are rare relative to the amount of prescribed fire safely burned), and in the arid West there are narrower windows for burning and challenges burning in mountainous terrain. Yet such challenges are not insurmountable. Implementing more prescribed burns safely in the West is the cheapest and most effective means of removing smaller fuels that spread fires, and better controls smoke production relative to uncontrolled wildfire, providing untapped benefits to both ecosystems and society.

What are wildfire impacts on people and homes?

Forests today are very different from the forests that Smokey Bear used to roam. The wildland-urban interface (WUI), where houses and wildland vegetation meet or intermingle, now accounts for about 10% of lower 48 states²⁰. From 1990 to 2010 the number of homes in the conterminous WUI grew 41% to 43.4 million, and the land area grew 33% to 770,000 km². Over 100 million people and about every third house is in the WUI, which is the fastest growing land-use category in the US. About 1.7 million homes in the WUI have a high to extreme risk of wildfire21, and efforts to contain wildfires that threaten homes and communities are costly and dangerous. Continued expansion of the WUI will further increase human exposure to wildfires and human-related ignitions.

Extensive research on wildfires in the WUI indicates that home ignition and subsequent loss is mostly a function of home construction and vegetation directly around the home is largely independent of fuels and forest management on distant federal lands²². Ember showers during extreme wind and burning conditions are a primary source of home loss, and homes that can withstand ignition from embers are generally the ones that survive.

Furthermore, about 70% of the WUI is private land²³, making homeowner and community fuels mitigation efforts paramount where federal

land-management agencies have little jurisdiction. Wildfire home loss research does not support the notion that damages to people and property will significantly decline if we manage federal forests better. Home wildfire protection and federal forest management are largely independent issues, which require distinctly different solutions.

Strategies for adaptation

Adaptation is when people and ecosystems adjust and reorganize in response to changing climate and wildfire trends to reduce future vulnerability. *How can we better manage and adapt to the growing threat of wildfire?* First off, we need to continue to safely and effectively suppress wildfire where it protects people, communities and vulnerable ecosystems. Smokejumpers will lead the way by snuffing out fire starts before they threaten communities and choke our skies with smoke. But despite valiant and ever-larger suppression efforts, we still are witnessing a continued growth in area burned. How can we better cope with this more-fiery world? We can thin better, burn better, and build better. Here's how.

Thin better

Unfortunately, more forest management cannot significantly alter regional increases in area burned in the West where non-forest lands burn the most, and few fire mitigation treatments encounter subsequent wildfire due to the large area of fire-prone forests and the low odds of treatments burning. More treatments will encounter more wildfire if prioritized in ecosystems that have a high likelihood of burning in grasslands, shrublands, and warm-dry forests.

Bigger treatments will also increase the odds of subsequent burning if implemented in areas most likely to burn such as lower elevations, south facing slopes, lower latitudes in the arid West and parts of the southeastern US.

Federal thinning projects are not well-suited to reducing home loss on distant private lands, where building construction and fuels directly around the home matter most but can be valuable in restoring forests that are adapted to frequent fire. Thinning better means thinning areas that burn frequently to reduce fire severity, helps ecosystems adapt to warming, and reduces carbon losses from wildfire. Thinning better means thinning on private land in

and around communities to help firefighters directly defend homes and neighborhoods where ignitions are highest.

Burn better

Burning better means implementing more prescribed fires in the West and allowing more remote wildfires to burn in ecosystems that have evolved with frequent fire to help minimize the severity and size of future fires. Implementing more prescribed fire in places with a high likelihood of wildfires encountering those prescriptions will reduce subsequent wildfire smoke, spread, and severity, and help firefighters more safely do their job. Furthermore, reintroducing prescribed burns in areas where historically frequent fire has been suppressed will help those ecosystems adapt to more frequent burning in response to climate change. Burning better also means reducing the number of human-related ignitions, especially in the WUI where people and property are at high risk.

Build better

National Institute of Building Sciences estimates that every \$1 spent on wildfire mitigation saves \$4 in wildfire disaster recovery costs. Retrofitting existing homes and building new homes to strict wildfire codes will save homes and lives, making homes able to defend themselves without the aid of firefighters. Integrating wildfire planning into regulations, codes and ordinances will help communities better adapt to likely wildfire. Examples are requiring defensible space around homes, evacuation routes and community perimeters; restricting development on steep, remote and high fire-prone lands; ensuring ample egress and evacuation routes and community shelter-in-place options. Promoting public awareness and preparation for the inevitability of wildfire is a key feature of community adaptation to increasing fire in the West.

Summary

New adaptive approaches are needed to manage increasing wildfire risk and costs. Better thinning, burning and building will help communities and ecosystems adapt to wildfire as climate continues to change. But over the long term, the most critical means of countering rising wildfire impacts is to mitigate climate change by transitioning to a low-

carbon economy sooner rather than later.

As I look out my window at eerily empty streets while we shelter in place against the COVID-19 storm, I realize that like protecting ourselves from novel coronavirus, we need to keep wildfire from spreading to where it matters most, our homes and communities. While we can effectively manage forests for many uses, we can't vaccinate the forests against wildfire. Instead, we need to better defend our homes and communities, become better adapted, and fight climate change by pivoting

to a low-carbon economy. Coronavirus showed us how well we can change our behavior for the greater good. We need to do the same to save ourselves from an increasingly dangerous, costly and fiery future.

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Snapshots from the Past





by Jeff R. Davis (Missoula '57)

The Jump on Bowl Creek

AT 1030 JUNE 5, 1961, I got a fire call to the Bowl Creek Fire off the Lochsa River on the Clearwater Forest. It was a two-man fire. Charlie Evans (MSO-56) and I took off at 1115 in a Twin Beech.

Charlie died later that summer of a brain hemorrhage, collapsing in the mess hall. I always thought the brain damage occurred on another jump we made together later that summer on the Salmon

River. The fire was called the Kelly Mountain Fire No. 2 and jumpers from four bases jumped it. As was predictable for Salmon River fires, everyone thumped in hard on those little FS-2, 28-foot chutes on those steep slopes. After that jump, Charlie complained of a bad headache, but no one thought anything of it at the time. There were a number of jumpers injured that day.

We were over the Bowl Creek Fire at 1200 and we jumped at 1215. The fire was an easy one to control in the wet Idaho timber country in early summer. We were on the fire in five minutes as we'd jumped right on top of it. Within the hour, we had it controlled and busied ourselves retrieving our gear from the timber and mopping the fire up until 2400.

We were back at it the next morning at 0500 and by 0700 we had the fire out. Our next job was to cut a helispot and had it completed by 1500. But the weather was socking in. The chopper flew overhead and dropped a note telling us to pack our gear cross-country downhill a mile and a quarter to a trail. We were to flag it for a packer to take out later. Then we were to hike down Obia Creek on the trail clearly marked on our map. The trail continued down an easy watergrade route to the Lochsa, where it continued an easy several miles to the Lochsa Ranger Station.

The hike-out looked easy enough on the map, but we were forgetting the unusually wet spring and the effect that had on the drainages we were to transverse. Our "no sweat" hike turned into a nightmare.

We started out at 1700, dumped our gear on the trail, and started down the drainage to the Lochsa. But the drainage soon became flooded and impossible to cross. Charlie and I started to hump it

cross-country, contouring the slopes in an attempt to regain the Lochsa on the opposite bank. By 2400 we knew we were in trouble. We were soaked clear through by the pouring rain and beginning to experience hypothermia. No shelter, no way we could start a fire—we were screwed.

But I had "rat-holed" a down sleeping bag that we had orders to shit-can after using it on the fire. The AFD had acquired a large supply of military mummy bags. There were so many that they ordered us to discard them after a single use on fires. I thought that was far too wasteful and put one in my PG bag when we left the fire

Charlie and I were in a fairly desperate situation, but I had an idea. I told Charlie I had this mummy bag and I thought we should both crawl inside it to get warm before we got in worse condition than we already were. He agreed, and we spent the night huddled together in a single fart sack, warmed against the storm.

We faced another hard four hours of steady hiking down

Forest Service Trail No. 234 the following morning, ravaged by cramps and diarrhea all the way. It took us until 1700 that evening to reach the Ranger Station. They'd been worried about us back in Missoula. The jumpers had tried to mount a search for us, but the foul weather cancelled the attempt.

Charlie and I kept the little secret about the shared sleeping bag to ourselves and finally the jump on Bowl Creek came to an end. Sometimes jumping the fire and putting it out is the easiest part of this job!

The Challenge: To Manage Wildfires or Aggressively Put Them Out

by Bruce Courtright (Associate)

Por those who have been observers of the United States Forest Service over the past 40 years, significant changes have taken place at all levels, affecting the agency's ability to effectively respond to demanding resource management situations. Some of the most impacting changes are:

- A reduction in the number of personnel at the field level.
- A reduction of funds available to accomplish field work.
- An increase in restrictive regulations generated by outside sources.
- Major changes in the overall climate worldwide which has changed the environment we manage.
- A shift in the political priorities affecting support for critical Forest Service programs.
 These changes and others have forced For-

est Service leaders, at all levels, to seek new ways of accomplishing mission-critical work. New

approaches, not previously thought of earlier, are now becoming the norm. These approaches frequently affect employee safety and that of forest residents and may threaten the health and sustainability of our nation's forests, both federal and private.

One challenge in the wildland fire arena has been how to deal with longer fire seasons, drier forest conditions, and an increasing overstock of biomass—mostly on public lands. This has led to the crux of the dilemma. That is, whether to aggressively fight fires as they emerge or allow some to burn, hoping for an effective reduction of forest overstocking. Previous methods of reducing stocking levels have failed due to limited funding, regulations, longer fire seasons and a continued growth of vegetation.

These issues force us to ask some fundamental questions. For example:

 Does Forest Service policy allow for managed fire decisions rather than full out, immediate

- suppression?
- Are we able to conduct timely reviews of managed fires to evaluate the effectiveness?
- Do we have the needed skills at all levels to address the fire challenges?
- Do we have properly trained leaders at the ground level to make the difficult decisions?
- Has the Forest Service been able to evaluate the success or impact of managed fires and the risks to firefighters, loss of homes and critical resources for managed burns that have failed?
- Does the Forest Service have clear direction and clear standards for when to manage a wildfire?
- Are we working on alternatives to burning, such as wood-based nanotechnology and other creative uses of biomass?
- Have we come to grips with leading-edge science that shows industrial and forest smoke carries harmful carcinogens, and is directly affecting both global warming and incidence of cancer?

Effectively addressing these issues calls for the evaluation of strong leadership and decision-making skills to enable the Forest Service to continue to lead the nation in protecting and nurturing our forest treasures. The following recommendations shall lead to once again creating forests that are more resilient to wildfire and provide the needed, sustainable resources to our nation.

- Immediately set up a task force of Forest Service employees and cooperators to evaluate current policy and direction on managing fires for resource benefits and develop revised direction to reflect the current and future challenges.
- Evaluate ways to increase investments for forest restoration and fire rehabilitation. We need to look at current programs and reach out to the Congressional Appropriators to provide for adequate funding for restoration work to insure America will have viable, sustainable forests to pass on to future generations.
- Evaluate the skills needed for our current and future workforce in both forest and fire management.
- The Forest Service shall confirm that current guidelines will ensure safety, use the best fire management tactics available, and hire skilled personnel to deploy these guidelines and

- tactics.
- Immediately direct scientific research to focus on wood-based nanotechnology and other innovative biomass uses to better utilize hazardous fuels, forest slash and other lower value biomass residuals.
- Ensure there is an adequate budget for innovative biomass uses and the associated development and expansion of cost-effective markets for a wide range of wood products.
- Build into the planning process—for managed and controlled burns—the fact that we may be adversely affecting the environment and the health of our firefighters and the public and need to find new ways to reduce unwanted forest fuels (for example, through innovative biomass uses).

This is a start at identifying some of the vexing challenges of today's and future forest needs. If strong, creative leadership is not insisted upon and made available, the future of our treasured forests looks very dim. We hope this paper will generate discussions on how we can best contribute to the saving of our nation's critical forest resources.

Bruce is a graduate of Utah State University with a degree in Industrial Relations and advanced work in Organizational Psychology. He worked for the USFS starting in 1963. Later in his career Bruce was assigned to the DC Office as Chief for Management Improvement and next as management consultant to the Chief of the FS.

He retired in 1985 and formed the National Wildfire Institute in 2010. Bruce is currently engaged in activities to improve the nation's wildland areas and reduce the risk of catastrophic wildfire.

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It's Time To Get Serious About Utilizing Our Aerial Firefighting Fleet

by Bill Derr (Associate Life Member)

erial firefighting strategies and aircraft mobilization tactics must be revisited given the intensifying threat of US wildfires. Existing models were built for a different time and have not kept pace with the change in the wildfire fighting environment. It is not lost on anyone who has been in the business for more than a few years that getting on a fire faster, even with small amounts of water, water enhancer or retardant, significantly reduces the possibility of that fire becoming national news. In the face of the 2020 wildfire season and the complications presented by managing it in a COVID-19 operating environment, keeping fires small will be the key to success in limiting both the spread of the virus and number of large fires.

Fire agencies need to use the nation's aerial firefighting assets in a manner that produces the best possible outcomes. The strategy is simple. Lead the battle through the pre-positioning of the numerous, smaller, significantly less-costly assets such as wheeled SEATs (single engine air tankers), Fire Bosses and Type 3 helicopters. If during the battle these assets need more support, send in the less numerous and more costly LATs (large air tankers). This strategy would optimize the usage and effectiveness of the country's entire aerial firefighting force and provide Incident Commanders appropriate time to request and receive the LATs if needed.

Initial attack (IA) and direct air strategies that utilize the large number of less-costly, smaller, aircraft can better contain fires and keep them small. This provides an advantage to the ground crews in putting out blazes more efficiently.

The Flame Act

Improving the safety and effectiveness of wildfire response is the highest priority set forth by the USDA and USDI in the 2014 National Cohesive Wildland Fire Management Strategy, commissioned by Congress as part of the 2009 FLAME Act. This strategic priority includes "enhancing wildfire response preparedness with an emphasis on both structural protection and wildfire prevention to maximize the effectiveness of initial response." To move the needle toward achieving national strategy goals, the way we respond to wildfire must be reevaluated to improve effectiveness and rein in costs. By doing so, we can ensure that programs to restore and maintain US land-scapes are positioned (and funded) to succeed.

A Change In The Air

The first pillar of the National Strategy—improving the safety and effectiveness of wildfire response—is more important than ever as blazes burn larger and dangerously hot over the course of a longer season. One area of wildfire response that is primed for increased effectiveness is the use of aerial firefighting.

For decades now, the use of firefighting aircraft has been central to wildfire response programs. However, as the decades have passed by, traditional aerial firefighting strategies have remained mostly unchanged despite the shifting fire environment and the introduction of new aircraft, technologies and tactics. To increase response effectiveness, it is time for these strategies to be revisited.

The yet to be published USFS Aerial Firefighting Usage and Effectiveness Study (AFUES), initiated in 2012, will likely produce a result that is already obvious to most wildland firefighters: The probability of succeeding in battling a wildfire is significantly increased when you start working a fire within its first hour. The problem is that there aren't enough LATs, Type 1 and 2 helicopters in the currently contracted USFS fleet to achieve that goal. These agencies need to find a way to do more with the same amount of limited funding. What this article proposes is a way to do that.

Fortunately, an entire fleet of smaller fixed-

wing and rotary assets do exist to achieve this goal. Our state and federal fire agencies, primarily driven by the USFS, need to rethink the integration of these smaller assets into their response to wildfire starts. A multi-million dollar study is not needed for most firefighters who have been in the field over the last two to three decades. Let's start demanding a change in how we use these costly assets. It will result in better outcomes for every citizen in a fire-prone region (less devastation and healthcare impact) and significantly reduce the risk and danger to our wildland firefighters.

Aerial Firefighting—Initial Response To Wildfires

It is well known that aerial firefighting is most effective through initial attack on small wildfires. During IA, small, prepositioned IA aircraft and helicopters can arrive on a scene within minutes, carrying loads of water or retardant that can help contain a fire until ground crews arrive. If smokejumpers are available in the area, the probability of success increases substantially. Each time a small wildfire is suppressed during initial response, agencies prevent greater devastation and millions more in associated costs that come with large fires. A USDA audit report found that when the success rate of USFS initial response dropped by 1.5% in 2007, it represented an estimated 150 more fires that escaped containment and cost the Forest Service an additional \$300 million to \$450 million to suppress. By avoiding decreases like this, the USFS could generate hundreds of millions of dollars in savings.

Additionally, there are public health benefits to extinguishing fires through quick IA. A lower amount of smoke is released into the air, which in past wildfire situations has affected the health of thousands of people in communities across the US. Fewer harmful carbons are emitted, which research shows can have a lasting impact on climate change—severe wildfire seasons such as 2015, 2017 and 2018 had the potential to release a decade's worth of stored carbon into the atmosphere in just a single season. The degradation of water quality is also reduced. These public health benefits underscore the importance of the National Strategy's first priority "to maximize the effectiveness of initial response" so wildfires can

be suppressed and extinguished while they're still small.

More specifically, the 2020 season is going to be an even greater challenge than any other previous season as a result of the COVID-19 pandemic. Fire agencies will be focused on reducing the number and size of fire camps. They will also be trying to minimize the number of evacuations that result in citizens sheltering in local gyms and auditoriums.

However, the reality is that the current aerial firefighting models are not optimized to execute the swift, reliable, initial response needed to control fires. Rather, aircraft are more often deployed when a fire has already escaped containment and grown into a larger, more expensive event. When this happens, typically large and very large air tankers (LATs and VLATs) are used to initiate an indirect attack. LATs and VLATs complete numerous drops of retardant to contain the blaze. Turnaround time between drops often exceeds one to two hours due to the time-intensive procedures required for loading high volumes of retardants. Turnaround time may also be impacted by basing requirements, as large aircraft must operate out of large airports with retardant loading infrastructure. Turnaround time contributes to the overall length of a wildfire mission, which in turn increases aircraft operating costs. In some situations, incident managers have tried to ameliorate long turnaround times by "filling the gap" with additional LATs to help paint more lines around a fire. Doing so essentially doubles the cost of a suppression mission.

When a small fire does break initial containment efforts, LATs play a critical role in suppression, but at a high cost. There just aren't that many of these aircraft to meet the supply of fire starts. For example, for the 2020 season, the USFS will have only 18 exclusive use LAT/VLAT contracts and 17 call-when-needed contracts for aircraft of the same size. With such a small number of large aircraft operating from a limited number of bases, they cannot be as widely distributed and numerous as smaller, less expensive aircraft. Given the broadening geographic areas requiring potential fire suppression, there is simply too much ground to cover to ensure a swift, reliable initial attack.

A New Path Forward

Most wildfires start as small, containable situations. Rapid IA is needed to avoid a large, multi-million dollar fire. Bolstered aircraft and smokejumpers, in many cases, would result keep these fires small. Given the large number of SEATs in the U.S., fire agencies should lead the response with these aircraft until ground resources arrive. When a fire start does break the containment efforts of IA, these agencies can utilize the scarcer and costly LATs and VLATs. This approach makes common sense, fire sense and dollars and cents.

Prioritize Use of Aircraft

During initial response to a wildfire start, every minute counts. Small, pre-positioned initial attack aircraft are needed to quickly arrive at the fire. Fire Boss aircraft can quickly reload at nearby water sources. Only a handful of IA aircraft have the numbers to do this job over a wide area:

Type 3 Helicopters—have the advantage of being able to drop water/retardant and can load from local sources. Disadvantage of small bucket load of 150-300 gallons. Best estimates put the number of these assets at 100.

SEATS—can be locally located, carry 800-gal-

lon load, operate out of smaller airports cutting down turnaround time. There are approximately 60 to 75 of these assets available.

Fire Bosses—a wheeled SEAT with amphibious floats, 800-gallon load, can load at local water source in less than a minute, 3.5-hour operating time over the fire. Given that most human settlement is near water, and at least two-thirds of historical fires in the US have been within ten miles of a scooper-accessible water source, there is undeniable value to adding Fire Bosses to firefighting arsenals. There will be 19 Fire Bosses available for the 2020 wildfire season.

Summary

Climate change, expansion of the WUI, and today's unhealthy landscapes are combining to create costlier fires that are burning and spreading much faster than they did 20-30 years ago. Public entities must bolster rapid and direct initial air attack capability by incorporating a network of smaller, lower cost aircraft into the aerial firefighting arsenal. Doing so will prepare agencies to rapidly respond to fire situations before small blazes escape and become multi-million dollar fires.

References are available on request.

LETTERS

Thoughts On Jan. Issue of Smokejumper

Chuck, I want to thank you for your article in this quarter's NSA magazine. You have hit on all the important points that I, and so many other Wildland Managers, have been saying/thinking for years.

The first time I was told we were not having a night shift, I couldn't believe it! How were we going to catch this thing if we couldn't use the cooler weather and humidity to help us? It just added several more shifts to this already big problem of containment.

Back in the "day," the full-time District IA folks worked maintenance on the strategically located ridgetop lookouts. We thought it was great work and that some old timers had their S—t together figuring out the right locations. Lookouts were always our eyes in the sky day and night. I

remember getting calls in the middle of the night from lookouts during and soon after storms. They could see glows from fires on the ground and those small smokes at daylight. We would put two- or three-person crews together and head that way. Sometimes we were on the fire before daylight. No GPS to follow.

We knew our District. With info from the lookout, maps, and a desire to find the fires quickly before the day had time to heat them up, we found them. Air recon was also used to locate strikes in hidden canyons and Wilderness Areas—money saved.

Nowadays maybe, maybe not for the air recon. For sure the lookout is taken out of the equation in locating, staffing, and extinguishing fires: Money lost.

Air Tankers are just another beast. You stated that whole issue pretty well. Probably pros and cons for both sides, given so many scenarios. But because we have been doing this for a long, long time, let's use our "in the ground experience" to our advantage.

What does the Fire Operations Manager want or need at the time he/she is in charge of the fire from the first discovery to the control of the fire? The need might be one bucket of water from a helicopter or several one-half-mile drops from a heavy air tanker. If it's a single-engine air tanker, we need a plan to make it happen. Money saved.

We know that safety is a big factor in all of our firefighting operations. Safety should always be a concern and a part of our every decision process.

Vegetation Management in our forests is a huge problem and we are way behind the curve on that. Having a secure full-time work force, that can make a living in the lower ranks of the FS/BLM, would help with the planning and execution of this work.

We also need to take a look at the big picture.

Urban encroachment, climate change, and user days in the forest add to the equation as well as population growth.

If we are to do our jobs for the safety of the public and protection of the National Forest lands, we need to get back to some basics in initial attack of wildland fire. We need to connect with management from local officials all the way to DC. Fires are getting bigger and will continue to do so.

We can throw millions of dollars at fires and then the season ends. Now it's winter, and all is out of sight, out of mind, but there's another season coming.

—Gary Cardoza (MSO-74)

Gary started fighting wildfire in 1968 before going into the military and spending 13 months in Vietnam. In 1973 he went back to the Forest Service and worked engines, Hotshots, Smokejumpers, Aviation and Vegetation Management. He later transferred to the BLM Fire Management Program in California and retired in 2006.

To The Editor

I want to commend NSA President **Bob McKean** (MSO-67) for his observations on the impacts of climate change on weather and wildfires. He has addressed the "elephant in the room."

And, it is heartening to read articles like "Wildfires and Global Warming: A Continuous Cycle of Destruction," by **Michael Rains** (Assoc). Michael does an excellent job of describing the effects of climate change and the relationships to wildfire and forest management.

The conditions and challenges that smokejumpers and wildland firefighters face today is not the same as the "two-manners" or even the "barnburners" we encountered in our firefighting days 30, 40 or 50 years ago. And, these conditions will continue to worsen with chaotic weather, droughts, floods, and megafires. It is important to learn to recognize the challenges and prepare to adapt to dealing with the future.

Yes, a stronger, more aggressive initial attack response in the fire season is needed. And so are other equally important measures such as hazardous fuel treatments in the wildland-urban interface, prescribed fire use outside the fire season, better zoning and building standards, and, an educated public knowing how to defend, shelter and or escape inevitable natural disasters.

For the sake of current smokejumpers, wildland firefighters and future generations, I hope that someday the NSA Board of Directors can come to a consensus on these issues. Past and current smokejumpers have earned a voice to advocate positions for positive change in how we address the emerging challenges of climate change and its devastating effects on our forests and rangelands.

Thank you, President McKean (MSO-67) and Michael Rains, for adding balance to the discourse.

—John Berry (RAC-70)

Retired Eldorado NF Supervisor

Poor Management, Questionable Laws – We're Paying For Them Now

by Major Boddicker (Missoula '63)

he last three issues of *Smokejumper* are real classics. They are excellent and complete treatments of the fire-management issue in the USA. Thanks! A copy should be sent to every member of Congress and all governors.

I remember when the Wilderness Act and other protections of Mother Earth were being stampeded into law. Being a strong skeptic of their no-use intents, which were being suggested by the advocates of the laws, I remember warning my graduate school friends that the unintended consequences of these no-use laws would not be good. There were much better alternatives available.

My first experience with the U.S. Forest Service implementation of the Wilderness Act was during the summer of 1968. I was jumping out of Missoula and had just stepped out of a jet boat in the Salmon River after the Chamberlain Creek Fire.

A fresh young USFS employee in uniform met us and asked our fire crew, a crew headed by **Larry Eisenman** (MSO-58), where our trash was. Larry looked at the guy with disgust and said firmly, "We ate it." End of discussion.

The Wilderness Act, which has significantly reversed more than 100 years of human use and economic and cultural development of these lands, was developed on the theme that human uses were bad, so they should be federally regulated out of BLM and Forest Service lands.

Our urban brethren, most of those whom would never set foot on these lands, shut them off to the folks who lived by and depended on them. We rural folk got and get no compensation, no exemptions, and no real access to complain. The agencies control the input and complaints, the protectionist radicals control the politicians, and they control the agencies. The agencies then use the *warm-the-frog* strategy to shut us out.

It has happened. Miners are gone, loggers are gone, sheep and cattle guys have been reduced



Major Boddicker (Courtesy M. Boddicker)

by more than half. Hunters, trappers and fishermen are severely reduced in numbers because our access has been shut off by road and trail closures, lack of road and trail maintenance, beetle kill, and fire-caused forest damage.

Colorado forests are like trying to force your way through a pick-up-sticks game. It is interesting how coincidentally our main USFS access roads get shut down during big game seasons.

We old and disabled, injured, ill, too young, too fat, and time-handicapped are out of luck when it comes to having access to thousands of square miles of BLM and Forest Service lands. Lots of these miles have old logging, mining, and ranching roads to them which we historically used. They could be easily opened and allow for environmentally acceptable uses by the public. What lands are not in wildernesses are classified as *roadless* – or made intentionally inaccessible – by BLM and the USFS fiat.

My government has cheated me. It has cheated me, my family, and friends when it comes to using my Forest Service, BLM, Bureau of Reclamation, and USFWS refuges and lands. It is a monstrous real application of the fable *Dog in the Manger*. You can't use it and we don't use it, but tough – we'll let it rot and burn because we have the power. Too bad, so sad; and we pay for this lousy service.

In Colorado, the Forest Service's first priority is recreation. Because our forests have not been significantly managed since the Wilderness Act, the Forest Service and BLM lands are pathetic,

beetle killed, droughted out from dog-hair stands of 60-year-old, 1.5-inch diameter junk soaking up the water.

I would guess that there is a reduction of approximately 70 percent of livestock grazing on Forest Service lands since 1968 due to forest tree overgrowths and intentional regulatory prohibitions. There is little to eat for big game and livestock. Access to livestock folks and federal grazing and use rules makes it economically unfeasible to graze it.

So, we have barren, shaded-out deserts under the tree cover. Where fires have burned the forest out, the regrowth without grazing or management is dog-hair thick, prime for devastating reburns.

Lightning on the Buckhorn Mountain, west of Fort Collins, Colo., started the High Park Fire in 2012. My grandson and I were working at a cabin I own about seven miles southwest of the fire. We watched the fire blow up.

I told my grandson that this was the fire the Front Range had been fearing and expecting for 60 years. In spite of it being close to old roads and trails (the lightning strike was adjacent to the Cache la Poudre Wilderness), vehicle access was seriously restricted.

The area is a steep, rocky tangle of unburned, ungrazed, and unlogged mountains, an ideal forest fire location. The sheriff's office and Rist Canyon Fire District guys moved quickly and moved out the people who lived in the fire's path and inholdings.

The Forest Service diddled. It took them about three days to get its *plan* going. By that time, the fire was a conflagration gobbling up forest, scattered buildings, and homes throughout the area. The Red Card requirements seriously retarded local responses, requiring a long period to collect qualified firefighters.

It was a get-out-of-the-way fire depending on the June winds. During the fire, there was no rain or help from the weather. The fire basically ran out of fuel when it hit the bottom of the mountains and petered out at the agricultural land, or the fuel ran out at the short grass prairie edge.

I have friends who lost their buildings, houses and machinery. Some still have not rebuilt due to county code rules, insurance hassles, access issues, etcetera. A person here has to be very wealthy to build in the mountains, even on previous building sites.

County and state governments in Colorado obviously intend to discourage building on private inholding properties in the mountains. BLM, Forest Service, and state land management agencies go out of their way to freeze out inholders, of course with the best of intentions. I have personal experience with this effort.

How long can a country exist that intentionally sabotages the efforts of its citizens at every turn? Our western public lands, with the exception of gas and oil leases, are a liability – not an asset – under current management. There is no end in sight for this poor management process. Wild horse management is a total Gandy Dance.

It would be interesting to have a credible economic study looking at the dollar losses and gains that have occurred since 1968 because of the multiple environmental protection laws. The overall impacts are like a gigantic negative interest being deducted from the economy of the western states, annually sucking us dry.

What have been the positive impacts of these environmental protection laws (including the Endangered Species Act, the Wetlands Protection Act, EPA, etc.)? Realistically, in my experience, none of them has resulted in better outcomes than could have been under 1968's prior management of laws. Even the few good examples I have seen could have been done better by less-punitive approaches and regulations. The Endangered Species Act is a great example of the heavy hand leading to miserable failures.

The Golden Goose of the USA is being killed by the Pied Piper's preaching the eco-wackos' chant and marching us toward drowning in a tar baby sea.

I strongly support NSA speaking out on the wildfire and related issues. I am not sure the negative effects of the current forest management are being discussed sufficiently. It would be instructive to hear the USFS's and BLM's explanations of their decision-making, assuming they would be honest and do so with positive intentions.

Frankly, I am tired of reading their doublespeak platitudes to CYA and pass-the-bucket gobbledygook. Who expects complete, straightforward answers from federal agencies?

Citizens Do Not Have The Right To Challenge Poor Gov't. Decisions—Accountability A Thing Of The Past

by Chuck Sheley (Cave Junction '59)

huck Pickard (MSO-48) sent me an article from the *Knoxville News Sentinel* (Jan. 2020) concerning the November 2016 fire that started in the Great Smoky Mountains National Park. The acre-sized fire intimately destroyed more than 2,500 homes and killed 14 people in Gatlinburg, Tennessee.

The US Dept. of Justice, representing the Park Service, argued that citizens don't have the legal right to challenge "discretionary" decisions of government workers even if those decisions are bad and lead to death and destruction." End of argument no matter how sad and unfair.

However, it was argued that the Park Service was required by its own guidelines to notify park "neighbors" about the fire. The US District Judge agreed with that argument.

Let's take a look at this fiasco. The fire started during a record-setting drought, and the park's fire management officer (FMO) decided to "contain" (let burn) the fire despite forecasts of high winds. Does this sound familiar to you who live in Montana and Oregon—Lolo Peak Fire/Chetco Bar Fires? We know the end result.

The FMO decided not to attack the fire five days before it entered Gatlinburg, waited four days before ordering water drops, and did not call in "most of fire crew staff," most of whom were on vacation due to the holiday (Thanksgiving). No one was assigned to watch the fire before new fires started on Nov. 28 within a mile of the Gatlinburg city limits. When winds reached 60 mph, the fire wrapped around the city.

We're in a new era. It has been reasonably argued that by putting out wildfire, we have created the current situation where the landscape is clogged with a high fuel load. Point well taken. We certainly jumped many fires in wilderness areas that should have been left to burn.

But, on the other hand, should we now burn our way out of this situation? Let's face it, we put out fires because the public did not want to destroy millions of acres of forests, burn down towns and kill people. Where would we be now if we let the forests burn? How many lives lost, towns lost and watershed damaged? There has to be a middle ground in this argument.

There is a time and place to let fires burn and let nature take its course. Situation: extended drought conditions, middle of July, extreme fuel load, resources depleted by hundreds of other wildfires, lightning strike starts a wildfire. Do we let this fire burn? After all, it was started by a lightning strike and this is the way fires started for centuries.

But we now have 330 million people in the U.S. More than we did in 1800. There are towns and people adjacent to these wilderness areas. Do we adapt to the current situations or go back to what "nature" intended to happen? Do we realize that we are a different country now than we were in 1800?

I'm depressed by the Gatlinburg fire and how it was handled. Fourteen people killed. That is just a **fraction** of what we experienced in California's Camp Fire, a few miles from where I live. There has to be a factor added to the equation—common sense!

Michael Rains (Assoc) has written a series of well-thought-out articles for this magazine on creating a biomass industry in the United States. Even though his thoughts are so logical, they don't stand a chance of being implemented. We do not have to burn our way out of the past! We can create jobs, manage our forests, and save us from tremendous health problems down the line.

Will we change and take a new path—not a chance.



BLAST FROM THE PAST



by Jack Demmons (Missoula '50)

Seeley Swan Pathfinder

March 1993

August 1950, 16 jumpers were airborne enroute to nine fires on the Nez Perce N.F. and were to be dropped two to a fire. My partner, Mike, and I were to be dropped on two fires about 500 yards apart.

Ten jumpers bailed out on five fires. Our turn came. We were to jump in the Three Links Creek area near "The Crags"—a very rugged section of the Nez Perce.

I exited and headed for the jump spot that was occupied by three mountain goats who took off when I shouted. Mike was dropped to his fire. We had our fires out by 2:00 p.m.

We packed our gear down to a place called Stuart Hot Springs. The sides of the canyons were so steep that we



walked most of the way in the creek. After tagging our gear for pack string pickup, we proceeded on to the Three Links Guard Station and planned to spend the night.

We reached the unmanned station about 10:00 that night and decided to continue walking all night to a road at Selway Falls. I used the phone at the guard station to call the Fenn Ranger Station to tell them of our plans.

After leaving about 11:00 p.m., we hiked on, running

into a bull moose who, thankfully, left the trail to us. It was about 6:00 a.m. when we rounded a turn in the trail and come upon bear rooting at something along the bank. I shouted and the surprised bear jumped straight up, switched ends in midair and, with gravel flying, headed down the trail.

Mike and I arrived at the Selway Falls Guard Station by 8:00 a.m. and were later picked up by a truck and taken to the Grangeville airport. Floyd Bowman (USFS pilot) picked us up in a Beechcraft Bonanza and flew us back to Missoula.

The experience from the Three Links fires was one of my most memorable while with the smokejumpers. Mike and I walked a little over 30 miles on the trip out of the very remote area in the Selway Bitterroot Wilderness Area.

Remembrances of Bob Charley (McCall '93)

Bob Charley passed away April 3, 2020. At this time, no obit has been received, but many emails have gone over the internet. Some are below:

Matt Ganz (MYC-01): "Many moons ago Todd Franzen, Mike Cooper, and I named a great little 3-man'er, out in some vast beautiful stretch of Nevada, the 'Charley Fire.' We sat on the high ridge, stirred up some coals, and just loved every report we sent to dispatch. 'Battle Mountain Dispatch, Bob Charley Fire, do you copy?' 'Go ahead, Charley Fire.'

"Bob Charley was the first jumper who taught me that, despite what some Ned like me might have thought, smokejumpers don't fit a mold of conformity. Why should we? One of the greatest strengths of smokejumpers is our innate individualism, despite the fact that we must always have a team mentality. Bob typified that for me. His low-key demeanor always lulled me to sleep, until that sharp intellect delivered some wonderful piece of fire

wisdom built off of so many years mastering his trade.

"I can see in my mind's eye his face, lighting up after some epic fire jump with him into Yellowstone, Hells Canyon, the Gospel Hump, or the Salmon breaks. He was an adept parachute handler, and he loved it."

Corey LeMay (MYC-98): "This is a punch in the gut. I worked a lot with Bob in my short career as a jumper. I jumped some fires with Bob and spent time climbing trees with him in Chicago. We always had a good time. He was a great bro to have."

Leo Cromwell (IDC-66): "Bob and I exchanged messages or calls regularly, and Bob always shared a story or two about his love for jumpers. He was always interested on how Bobby Montoya was doing and how he defeated his kidney problems and dialysis."

Brad Sanders (MYC-88): "This is very sad news to hear about the loss of Bob Charley. He was a fine, humble man, a father, and a smokejumper with a unique wit and sense of humor."

Frankie Romero (MYC-89): "So many great memories of Bob. Not just all the fires we were on, but just being around him. Bob kicking all our butts at the annual Ponderosa Trail Run—all the cool T-shirt designs—cookouts at married housing with Priscilla and their kids. Ours, along with all the other smokejumper kids, running around, as Bob would say, 'like a pack of wild Indians.'

"Most of all Bob had the gift of perspective. He could bring you back to earth if you were thinking a little too much of yourself. More often, he would pick you up when life was getting you down and show you that things weren't all that bad.

"More than once he made some wisecrack that turned the mood of the whole room around, definitely a gift that the rest of us got to share in. Thanks Bob, you were a team captain when it came to crew morale."

Christy Behm (MYC-01): "God speed Bro. You are missed by all. After this pandemic is over, I think we should have a memorial party for Bob if possible, this summer. He was such an integral part of the jump base for many years."

Turn Your Pins and Patches Into

Helping Other Smokejumpers

and Their Families

Send us your Smokejumper or other pins, Trail Crew pins, and/or patches that are hiding in your sock drawer. We'll sell them to collectors on eBay with all money going into the NSA Good Samaritan Fund and acknowledge you in a later issue.

Send to: Chuck Sheley—10 July Ln—Chico CA 95926



Maggie Wright (R), wife of Clay Wright (MYC-79). presents Good Sam Fund check to Rainey Jensen, wife of Lee Jensen (MYC-69/deceased), for needed roof repairs on her home. Thank you GSF donors. (Courtesy M. Wright)



Remember and honor fellow jumpers with a gift to the NSA Good Samaritan Fund in their name. Hard times can fall on many of us at any time. The NSA is here to support our fellow jumpers and their families through the Good Samaritan Fund. Mail your contribution to:

Chuck Sheley 10 Judy Lane Chico, CA 95926

Robert "Bob" Dusenbury (Missoula '46)

Bob died September 23, 2017, in Anacortes, WA. After graduating from high school in 1942, he joined the Navy and served as a Petty Officer on LST 281. Bob delivered tanks and supplies to Charlie Sector on Omaha Beach on June 6, 1944. He moved to Missoula after the war and got his degree in Forestry from the Univ. of Montana.

Bob jumped 1946-48 at Missoula and moved to Charlo, Montana, in 1955 where he worked for the BIA, ending up in Cedar City, Utah, as a manager for the writing of the first Grazing Environmental Statement for Utah. Bob retired in 1981 and moved to Anacortes and started Dusenbury Marine Services, spending many hours on his 40-foot sailboat.

G. Brent Wynn (Idaho City '56)

Brent, 81, died May 22, 2019. After graduating from high school, he took his first job as a smokejumper with the USFS, spending five summers fighting fires as a jumper. He paid his way through college, a LDS mission, and helped out with the expenses of the family farm in difficult times. During these early adulthood years, he served an LDS mission to the Western States. He worked for Thiokol, Boeing, Evans & Sutherland, Link Flight Simulation, and retired from Hill Air Force Base. His favorite job was teaching Design Engineering and Technology at Brigham Young University.

Brent was active and proud of his good health and active lifestyle, competitively finishing 20 St. George Marathons and multiple triathlons.

Gordon L. Quigley (Idaho City '55)

Gordon died May 12, 2018. After serving with the U.S. Army in Germany, he completed his bachelor's degree from Idaho State and later got his master's degree and PhD. from the University of Oregon. Gordon taught in Boise for five years before moving to Eugene, Oregon, where he was a teacher and principal. The last ten years of his career were spent as Director of American International Schools in Saudi Arabia, Yugoslavia and Ethiopia. He jumped at Idaho City 1955-58.

Sam L. Greiner (Missoula '54)

Sam died June 28, 1971, in a helicopter accident while working a fire in Alaska. He was a sergeant in the Oklahoma National Guard during the 1950s and was deployed to France. Sam jumped at Missoula 1954, 55, 58, Fairbanks in 1962, and Cave Jct. in 1969.

Sam was working as a seasonal firefighter in Alaska when the helicopter he was in was forced down near McGrath, Alaska. He walked into the rotor blade and was killed.

(Thanks to Fred Cooper for researching this obit as part of the NSA History Preservation Program. Ed.)

Richard D. Cromwell (Missoula '68)

Richard,48, died July 10, 1999, in Hamilton, Montana. He moved to Montana from Southern California in 1961 and jumped at Missoula 1968-71, where he had 17 practice jumps and 35 fire jumps.

In 1972, he began working as a dispatcher for the Bitterroot N.F. While in this position, he trained Job Corps enrollees for fire crews and helped develop the Selway Bitterroot Fire Management Plan. In 1985, he began working as the manager and outfitter for the North Star Ranch in the Selway Bitterroot Wilderness, spending many hunting seasons guiding and packing.

(Thanks to Fred Cooper for researching this obit as part of the NSA History Preservation Program. Ed.)

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Contributions since the previous publication of donors April 2020
Total funds disbursed to smokejumpers and families since 2004—\$207,240
Mail your Good Samaritan Fund contributions to:
Chuck Sheley, 10 Judy Ln., Chico CA 95926

Harold W. Meili (Cave Junction '52)

Hal, 89, died January 28, 2020, in Cheney, Washington. He was a graduate of Eastern Washington College of education and served in the U.S. Coastguard. Hal taught 5th grade in Spokane for 25 years. Two highlights in his life were watching his daughter, Launi Kay, win the gold medal in sharpshooting at the 1992 Olympics and seeing his daughter, Heidi, at the Seattle Seahawks games as a professional cheerleader. Hal jumped at Cave Junction for the 1952 season.

Ralph M. Miller (McCall '45)

Ralph, 93, died August 20, 2018, at his home in Anchorage, Alaska. He jumped at McCall during the 1945 season and later went into the logging business in Sweet Home, Oregon.

Ralph moved to Alaska in 1956 and pastored churches in North Pole, Sitka and Anchorage. He served as an elected official in the denomination's Alaska District Office from 1984 until retirement in 1996.

William B. Brophy (Cave Junction '56)

Bill, 81, died May 20, 2018, of a severe brain injury sustained as a result of a fall in Santa Cruz, Calif. He moved to Redding as a child and

jumped there 1957-59 after his rookie year in Cave Junction. Bill received university degrees from the U.C Berkley and U.C. Davis. He had a 30-year teaching career at Chabot College in California.

After retirement, Bill wrote a nature column for the "Ridge Rider News" in Shingletown, CA. He was a runner and bicyclist who, when they first met, told his future wife, Kay, that he had totaled as many running miles as the circumference of the earth.

John William Eaton (Redding '63)

Bill died February 6, 2020, in Highland, CA. After graduating from high school, he began his 34-year career with the USFS working on the Lassen, Shasta-Trinity and San Bernardino National Forests. Before retirement in 1987, Bill was FMO for the Cajon District of the San Bernardino N.F. He worked with FIRESCOPE in the creation of the Incident Command System and fought fires throughout the Western U.S. Bill spent two years in the US Army, being discharged in 1959.

Two days after retiring, Bill began a new career with the Alvord School District (Riverside) where he was the Director of Maintenance and Operations, a position he held for 24 years before retir-

ing again in 2012. Bill was part of the unique R-5 "Retread" program and jumped from 1964-70 as a "Retread."

Ramon J. "Ray" Mansisidor (McCall '46)

Ray, 95, died March 11, 2020. He graduated from Homedale (ID) High School in 1942 and went into the US Army in 1944. Ray trained flight engineers, pilots and co-pilots on bombers at Williams Field, Chandler, AZ, until the end of the war.

Ray went to Washington State for two semesters before returning to McCall where he jumped the 1946-47 seasons. In 1956 he came back to Homedale to help on the family farm where he has been since that time. Ray was an accomplished pilot and was instrumental in the creation and development of the Homedale Municipal Airport.

In 2020, in recognition of 60 years of service, the Owyhee Co. Soil and Water District renamed their "Conservationist of the Year" award the "Ray Mansisidor Conservationist of the Year" award.

Rob Lundgren (Associate)

Rob died March 4, 2020, at his home in Walla Walla, Washington He received his B.A. in Industrial Technology from Washington State University in 1968 and then spent four years in the USAF. Rob had a 31-year career with the USFS before retiring in 1997. He was FMO on the Lochsa R.D. in Kooskia for twenty of those years.

Rob was the cook on Tom Kovalicky's TRAMPS crew for 12 years. "He was a volunteer, an outstanding organizer, and all on his own dime," said Tom.

Robert L. Derry (Missoula '43)

Bob died March 23, 2020. The last of the Derry brothers, he rookied in 1943 before enlisting in the Navy and serving in the Seabees until the end of the war. Bob was involved in landings in the Marshall Islands and spent eleven "miserable months" on Kwajalein. He was a heavy equipment operator in Spokane 1946-49 before joining the Douglas Co. Fire Department for a 30-year stint as Fire Chief.

Bob remained in excellent physical condition as he aged as anyone who worked with him on the NSA Trail Projects can attest. He continued to bike, ski, kayak, row and run in later life.

Merl C. "Bud" Filler (McCall '52)

Bud, 86, died of cancer March 26, 2020, at his home in Boise. He was a graduate of Penn State University and earned his master's degree from the University of British Columbia. Bud jumped at McCall 1952-54 and also served as an Artillery Officer in the U.S. Army's 9th Infantry Division.

Throughout an exemplary career in forest products, Bud worked for several major forest products manufacturing companies and later cofounded Filler King Company, a highly successful manufacturer of structural engineered wood products. He authored two books and was a pilot.

As a volunteer National Ski Patrolman for many years at Bogus Basin, he was first on the hill and one of the last off. Bud was a Life Member of the NSA

Families, Friends Get First Look at Site of Fatal 1957 Trimotor Crash

by Kim Briggeman, The Missoulian (Missoula, Mont.)

TOWNSEND, Mont. – It was nothing short of a pilgrimage.

They came by bus, car, truck and airplane Aug. 19 to a mountainside most had never seen.

Some of the two-dozen friends, fans and family

members of Penn Stohr Sr. and Bob Vallance had been notified just a day earlier of the Forest Service escort to the slope where the two pilots died in 1957 in a fiery crash of a Ford Trimotor.

They showed up anyway, not a few of them

blinking away tears as they paid homage and sought answers to questions more than six decades old.

"It turned out to be a lot more than we expected," confessed Jamison Jordan, an archaeologist for the Helena-Lewis and Clark National Forest's Townsend Ranger District.

Two fathers, husbands and daring mountain flyers lost their lives here on the morning of June 19, 1957.

Penn Stohr Sr., 54, was a fearless, cigarchomping pioneer aviator who grew up in Plains and started building his legend as a backcountry pilot in Idaho. His skills were arguably second only to Bob Johnson himself in Johnson Flying Service's table of flyers. Stohr is in the Idaho and Montana's Museum of Mountain Flying aviation Halls of Fame, one of seven inaugural inductees in the latter in 1995.

Bob Vallance, 31, had been a radioman on a warplane in the Pacific during World War II. He became a pilot for Johnson in the 1950s, and was in his fourth year in the front seat that morning, learning the ropes of weed spraying in tricky terrain from one of the masters.

Among those who climbed the steep hillside above a remote Forest Service road in the Elkhorn Mountains was **Penn Stohr Jr.** (Associate), who surveyed the rusted engine mount, control column, rudder pedals and other parts of the 1929 "Tin Goose."

Young Penn had just graduated from eighth grade at Paxson Elementary in June 1957 when he rode with his parents to the Missoula airport to see off Penn Sr., who'd been called late on a Monday on a sagebrush-spraying job west of Townsend. It was the last time he saw his father.

"This is an emotional tie-up," he told the Townsend gathering.

Stohr had followed in his father's aviation footsteps, rising to the ranks of chief pilot for Johnson and retiring in 2003 as an executive at Evergreen International in Oregon.

Like most others who'd worked for Johnson Flying between 1957 and its sale to Evergreen in 1975, Stohr was well aware that a wing and most of the fuselage from the Trimotor sat in the Johnson "bone yard" on the east end of the Missoula Airport.

What he and evidently everyone else didn't realize was that parts of the plane remained at the

crash site.

"I was surprised there was as much there as there was, surprised Johnson didn't take it all out," Stohr said.

Marcia Vallance Babowicz was on Monday's pilgrimage too.

A retired bank executive from Hamilton, Mont., she was 5 years old when her father died up here. Stohr Jr. himself tracked her down on Sunday to let her know about the Townsend gathering. Babowicz canceled a doctor's appointment on the drive over with her husband Don, son Nate Souther, and cousin Donna Gastineau, who was Bob Vallance's niece.

"I wasn't really looking for closure," Babowicz said afterward, "but I think just having the additional information was comforting to me and meaningful."

Gastineau is several years older and remembers her father better, Babowicz noted. "She said she's been waiting for this her whole life."

Barely a month had passed since someone approached members of a trail crew from the Townsend Ranger District and told them of the wreckage up Indian Creek Road. The crew left a note on the desk of Jordan's boss, Jen Ryan. Ryan contacted Dick Komberec, a founding member of the Museum of Mountain Flying in Missoula.

"We were looking to learn about what we have on our forest. I think initially we knew about it, but it kind of got lost in time," Jordan said.

He'd been the first from the ranger district to locate the debris, more than 15 rough miles out of Townsend. Jordan said he drove past it two or three times before he saw an engine mount sticking out of the sagebrush.

After some follow-up exchanges with Komberec and author Steve Smith, another museum founder, a date was set for Aug. 19 to meet and see what was left.

"At this time, in so many ways, this is the most significant Johnson Flying Service event for our museum's stated mission since we started" in 1994, Komberec said.

That mission, as stated on the Museum of Mountain Flying's website: "To preserve for future generations, the legends, lore and historical legacy of pilots and other individuals whose pioneering aviation exploits helped bring America's Rocky Mountain West into the Air Age."

Smith, whose eyesight is failing, got a ride to Townsend from Missoula with an old friend, Chuck Bryson.

"When I talked to Jamison Jordan and first heard about the Forest Service going to that crash site, my impression was there were going to be two or three people along," said Smith, who has known Penn Stohr Jr., since their high school days in Missoula in the 1950s. He wrote extensively about the circumstances surrounding the fatal crash in his book *Fly the Biggest Piece Back*, a history of mountain flying and Johnson Flying Service.

Three foresters were at the spray site serving as flagmen and from a half-mile away witnessed the Tri-Motor as it made one pass over its sagebrush target from the head of Crow Creek and started on the second. An engine seemed to miss, one said. Suddenly the left wing clipped a hillside. The plane, N-9642, cartwheeled across the uneven slope, "all but disintegrating after hitting a huge fir tree," Smith wrote.

It came to rest upside-down some 350 feet from the initial point of impact. The spray tank containing diesel and herbicide was thrown free, but the gas tanks exploded. The airplane was all but consumed in flames. Stohr and Vallance probably died instantly.

Smith remembers hearing the news on Don Weston's noon broadcast on KGVO Radio. The Missoula Sentinel bannered it across the top of Page One that evening, and the Missoulian played it at the top the next morning.

"Penn Stohr was the miracle pilot of Idaho, a real flying legend," Smith said recently. "When that happened, western Montana was stunned by it."

Marcia Babowicz has lots of pictures of her father, Bob Vallance, but doesn't remember much about him, or about what must have been a horrible time for her mother, Marjorie, and brothers David and Jack, who were 9 and 8.

"I'm sure they kept a lot of things from me," she said.

Still, she was thrilled last Sunday when she got the out-of-the-blue call from Stohr. Years ago Stohr had met the late Jack Vallance, a lifelong pilot, but never his younger sister. Tragically, their brother David died in the crash of an Army supply helicopter in Quang Tin Province of Vietnam in 1969. He was 21. The 1957 crash left lingering questions. For one thing, it remains a mystery who was flying the plane at the fatal moment, Stohr or Vallance.

"Of course we had always wanted to know more, but we had always been told it wasn't accessible, the Forest Service had salvaged everything and there wasn't anything to see," Babowicz said.

Not knowing what to expect, she and her family arrived at the ranger station in Townsend Monday morning, where Ranger Mike Welker, and district archaeologists Ryan and Jordan had arranged a reception.

Stohr, who lives in the Portland area but spends Augusts at Swan Lake, flew in from the Flathead with Hank Galpin in Galpin's vintage 1928 Travel Air 6000, one of just a handful still airworthy.

A 12-passenger bus pulled up to the ranger station with a group from Missoula, including Komberec, his son Eric, and others at the Museum of Mountain Flying.

Instead of the anticipated handful, nearly two dozen people amassed in a small conference room for what turned into a moving tribute, each taking turns sharing his or her reason for being there and many thanking the ranger district for providing the unique opportunity.

Then, in a line of pickups, cars and the bus, the hour-long drive to the site began.

Once there, Crystal Schonemann from the crew of the now-famous DC-3 smokejumper plane known as *Miss Montana*, placed two wreaths against a rusted piece of airplane. Two weeks earlier, 13 such wreaths fashioned by Pink Grizzly in Missoula were dropped in the Gates of the Mountains north of Helena, in a tribute to the 12 smokejumpers and one firefighter who died at Mann Gulch in August 1949.

"I was very, very scared to go there because I didn't know how I'd react to it," Stohr said the next day. "I was frightened that it would be overwhelmingly emotional. It was, but it wasn't probably as deep as I thought it might go. I think I'd already reconciled it over the years, and then following in his footsteps probably made it a little better."

With the others on the hill, Babowicz tried to imagine the terrible crash in her mind, in order to come to grips with it.

"When we were driving up there I was thinking, What the hell is my father doing flying in this country?"

she said.

Her conclusion: "Those pilot guys are crazy. I can say that because I'm from a family of pilots."

Babowicz was impressed and enraptured by the stories she heard from men who knew her father and Stohr and the planes they flew.

"It was overwhelming, really," she said. "Just

surreal, one of those things like, *Is this really hap*pening?"

Something else occurred to Babowicz about the men who flew these mountains, even as she stood in the wreckage.

"They were pioneers," she said. "I never thought of it like that."

Paradise With A Wind Chill

by Gary Shade (Missoula '69)

"The two most important dates in our lives are when we are born and when we figure out why."

—Samuel Clemens

The season, I went with a spring detail down to our base in Silver City, N.M.

While there, a newspaper want ad was being handed out regarding employment in Antarctica. I took one look at the ad and was immediately hooked. The posting started out with Shackleton's want ad, in the London *Times*, 1900, recruiting men for a bit of adventure and hard work to Antarctica:

"Men wanted for hazardous journey, small wages, bitter cold, long months of complete darkness, constant danger, safe return doubtful, honor and recognition in case of success."

Well, any good (single) jumper worth his parachute could not resist that bait, so I sent in a resume, just for the hell of it, and promptly dismissed any notion of hearing from the contractor.

Fast-forward almost a year. I did not show up for the 1978 season as I found myself with a new bride, kid on the way, and a great new "real job" as recreation forester on the Rogue River National Forest. We had just moved into a very nice Forest Service employee house.

Then, out of the blue, a Western Union telegram was delivered to my door. It was from the Antarctic contractor, Holmes and Narver, stating that I had been selected for a spot on their crew going to a research station for the Antarctic sum-

mer, and that I was to report within two weeks for departure out of San Francisco, and please confirm my acceptance.

OMG and double WOW!

The wire didn't state the position I was to fill, but that didn't matter. When I showed my bride the message, she put up a strong face and, with a tear rolling down her cheek, stated, "It's okay. You should go."

No, that ain't happening. But the seed had been planted, and the southern pole became a lifelong interest of mine. As a memento, I kept the scrap of ad and stuffed it away for another lifetime.

Fast-forward again to the present day. The opportunity and funds became available for me to do one thing on my "bucket list" – and that was an easy choice, since I had only one item on the list: *Experience Antarctica*.

With much research, I found the exact opportunity that satisfied my many interests, an expedition/cruise with Oceanwide Expeditions – www.oceanwide-expeditions.com. This company specializes in North and South polar excursions. What caught my fancy was a 20-night cruise involving landings on the Falklands, South Georgia Island, Elephant Island, and the Antarctic Peninsula.

As a group of world travelers and adventurers, I know that many of the readers of *Smokejumper* magazine would have a keen interest in this type of vacationing.

I have returned from my voyage and will briefly share what I found.

There are many cruise lines offering expedition/cruising around the planet. The venues are many with a wide range of opportunities, including many types of ships. I can only comment on my experience with Oceanwide Expeditions.

I found that my experience with them exceeded all my expectations, and, though costly at \$500 per night, the thrills far exceeded the costs. The \$500-per-night cost seems to be some kind of price point to shop around for South Pole expeditions.

I could write a short book on my journey, but this format doesn't allow for lengthy descriptions. I will just try to use a few descriptors: otherworldly, spectacularly magical and, most importantly, one constantly experiences the unexpected. Every day I would say to myself, *It can't get better than this*, but the next day it always would.

Sir Shackleton in his book *South* stated most eloquently: "We drifted along in a strange unreality."

Research will give one a lot of information on this type of cruising, but I learned some of the things that won't appear in the marketing material:

The outrageous

First, the cost of Internet was \$37 per 100MB and not always working. A can of Coke or a beer cost \$3.50. Laundry services were offered, but started at \$3 for set of underwear. Did my own laundry in the bathroom sink, but just knickers.

My bad decisions

Didn't own a balaclava and thought my extralarge bandana would work just fine; first bad decision. The second dumb decision was not getting familiar with my new camera and smartphone photo capabilities. I thought I would use the time on board and on land to OJT my photo skills and equipment knowledge. The photographic opportunities were immediate and overwhelming. I should have taken the time be at the top of my picture-taking game before the trip.

In summary

Many of the cruise lines offering these expeditions/cruises are European. They like Euros, and make sure one's cruise is in English. Electric sockets on board are Continental. Be sure to check if boots and outer coats are offered or not. All outerwear needs to be waterproof from head to toe.

I found that ambient temperatures are as low

as 25 degrees Fahrenheit and the wind chill is around zero. I went in November, but temps seem to be constant through their summer months of November to March.

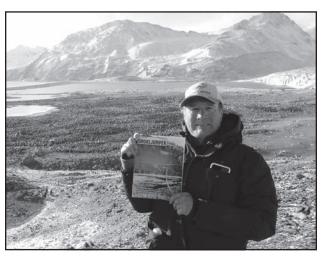
Biosecurity is a serious issue, especially on South Georgia. Outerwear and boots are sanitized and inspected before every excursion ashore. Old, ratty Velcro is discouraged as bugs and plant material are easily trapped in the material. Wash all outer gear before going down.

The month one chooses to travel will determine what wildlife will be observed. Financial issues may limit ones choice of locations – South Georgia Island or the Antarctic Peninsula. Each is a very different experience.

South Georgia is a place I will call "Paradise" because of the amount of interaction one has with wildlife, and topography. The peninsula is otherworldly – less wildlife, but one has the experience of being on another planet; quite extraordinary.

Oh, I actually did have a good idea. I had understood that once on land, if nature calls, one can't relieve him/herself on land. The guides will have to take you back to the ship.

Well, with my personal plumbing being more than 73 years old, when nature calls it's with a 9-1-1 number. So I took with me half-a-dozen sets of man diapers in the form of underwear. I found that to be quite reassuring and comfortable. Figured I might as well get use to this notion of man diapers – as in the not-too-distant future, Amazon will be delivering these, by the case, to my door in plain brown paper wrappings.



Gary Shade takes Smokejumper the Antarctica. (Courtesy G. Shade)



ODDS AND ENDS



by Chuck Sheley

Congratulations and thanks to Jerry Bushnell (NCSB-72), Leonard Wehking (FBX-85), Rich Krenkel (MSO-71), and Doug Bucklew (CJ-67) who just became our latest Life Member(s).

Grant Beebe (NIFC-90) was selected as BLM's Assistant Director of Fire and Aviation in a January 2020 announcement. Grant started his career in fire-fighting on one of my Type II crews out of U.C. Davis. In the 10-person rookie class at NIFC in 1990, three were from the Davis Fire Crew. Of the other two, Manny Diaz is a M.D. living in Woodland, CA, and Dan Scudero is one of those in the NSA database for whom we have no contact information.

Camp Fire: In the local Chico newspaper, there was an article this morning (2/11/20) about the "forgotten deaths" from the Camp Fire. Interesting because these people are not included in the initial fatality list. Paradise was a retirement community and many of the deaths in Nov. 2018 were elderly people trapped in their homes.

However, today's article told about a 24-yearold young man with muscular dystrophy who passed shortly after the fire. Since that day over 50 additional deaths have occurred that are linked to the fire by medical experts.

Benny Mitchell (GAC-60): "Chuck, wanted to let you know that I have read the Jan. issue at least three times cover to cover, especially "The New Fire Triangle" and the review of the Biscuit Fire.

"I am in lockstep with every word in these articles. You are 'spot on' in all respects. The FS doesn't fight fire to win anymore."

Don Havel (FBX-66) passed this along from the Jan. 1940 *Hunting and Fishing magazine*: "Preliminary trials with a specially designed parachute, in which jumpers were able to steer themselves

with improved accuracy, indicate that a firefighter may soon be jumping from airplanes to put out forest fires. According to plans now being tested, firefighting tools are to be dropped by the jumper before he leaves the plane. It is claimed that one good 'smoke chaser' can do wonders in controlling a forest fire if he gets there on time and the parachute appears to be the answer."

Just got word (March) that Jerry Spence (RDD-94) is the new Base Manager at Redding. I remember way back to the 2000 reunion in Redding. Jerry handled the floor mic at the Saturday evening dinner. It was a pretty amazing thing as he, and a few others, ran the floor putting the mic in the hands of jumpers at the dinner. Fred Brauer (MSO-41) spoke a few words. Amazing, we heard from a smokejumper legend—long gone now. In any case, congratulations Jerry. They made a good pick for the job!

Marty Mitzkus (MSO-99) has accepted the position of Deputy Forest Supervisor on the Nez Perce-Clearwater National Forests.

Marty jumped Missoula in 1999 and West Yellowstone 2001-03.

KIVI news Boise reports (April 7) that the BLM smokejumpers are making face masks to give to people during the COVID-19 pandemic.

The most recent Good Sam Fund assistance went to the wife of a former jumper who was killed in an accident while working. The funds will help with bills and personal needs. Thanks again to all of you for your support of this fund.

Herb Fischer (MSO-57): "I think dropping retardant out of a 747 makes about as much sense as hauling coal out of a mine in a Lincoln Town Car—you can do it, but why? (Herb has an amazing 30,000 hours of flying time. (Ed.)



Lynn and Alberts Selected for Al Dunton Leadership Award

Ed Lynn, Missoula Smokejumpers, was selected posthumously due to his extensive dedication in serving others as a humble and quiet leader. As noted in his nomination, "He led by example and was universally respected by other jumpers as a field going, fun loving, and hardworking guy." Ed mentored and trained others as a smokejumper, professional faller, teacher, and as a coach. He was a critical part of the Missoula Smokejumper saw program and took an important leadership role in Region 5 as part of the Porterville Organized Crew program on the Sierra N.F. Ed rookied at Missoula in 1995 and worked for both the Grangeville and McCall Smokejumpers before returning to Missoula. He was diagnosed with an inoperable brain tumor in the fall of 2018, while on fire assignment, and passed away on December 26, 2018.

Seth Alberts, Great Basin Smokejumpers, was selected due to his leadership attributes displayed in mentoring and training others. His constant drive to do the best job possible, while taking on any challenge, is noteworthy. The basis for his selection is Seth's effectiveness at developing and inspiring others to continually improve their own knowledge, skills, and abilities. Seth rookied for the Great Basin Smokejumpers in 2012, served as the Great Basin Smokejumper Lead Rookie Trainer, and is currently the acting Loft Assistant Manager.

The award is presented annually to one BLM and one U.S. Forest Service smokejumper who goes beyond the requirements of the job and demonstrates excellence in leadership.

Bill Moody Receives Prestigious Award

Bill Moody was honored at the North America Aerial Fire Fighting Conference held in Sacramento this past March. The "Walt Darran Award" is presented annually to recognize significant contributions by individuals or organizations to aerial firefighting.

From the awards program: "Bill is an outstanding personality who has devoted his life to halt and reduce the adverse consequences of landscape fires affecting our precious environment, human lives, and the assets of our societies. And to enhance the safety of our dedicated firefighters in the air, on the ground, and between these two spheres – the smokejumping community.

"He is a professional who began his career as firefighter, Smokejumper Base Manager, as well as regional/national fire/aviation specialist and instructor, national fire team aviation specialist, and the author or project leader of several fire-aviation operations guides.

"It is (presenter quoting) not only your professional work and your tireless efforts after retirement from the US Forest Service in December 1989 that you had formed a consultant business. This did not only allow you to continue instructing fire aviation courses in the United States, Canada and in Mongolia. Since 2004 you had accompanied Evergreen Aviation in the development of the Boeing 747 supertanker project and primary author of the B-747 Supertanker Operations Plan and related papers on potential fire uses of the B-747."

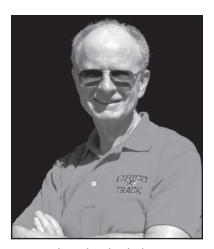
Congratulations, Bill, from the NSA and our membership.

National Reunion June 4-6 Boise



SOUNDING OFF from the Editor





by Chuck Sheley (Cave Junction '59) MANAGING EDITOR

Can We Ever Stop Making Up For Past Wrongs?

IT HAS BEEN almost 18 months since the Camp Fire and not a day passes without another fire-related issue appearing in the newspaper. It seems like it will never cease.

From the local news: "Most of Butte County's Native American tribes have joined an effort asking the state of California for a designated share of the work in ongoing cleanup efforts after the Camp Fire as well as a greater say in the disaster recovery process.

"Their goal is to leverage their status as sovereign nations into contracts in the next phase of the cleanup, which is the removal of hazardous dead or dying trees from near public

infrastructure. They want the state to create a 20 percent carve-out for local workers and tribal workers.

"The effort escalated on Tuesday when representatives from the tribes stormed a government disaster recovery task force meeting with their demands. 'When you are working in *our* territory, and you're negotiating and building contracts to touch all this, you have to consult with us.'"

"This is our land, and we've been here our whole lives, and we're staying here," one tribe member said.

I had a tough time reading this article. When I grew up, I remember a small Native American (NA) piece of land in Chico near where my grandparents lived. There were no NA settlements in the area of the Camp Fire. I guess they feel that everything is "our land."

Before my Dad died, he wrote a bio. His mother died when he was four and his Dad was left with six children. They lived in Pittsburg, CA, where Italian was spoken as much as English. His father got a job in "the woods" and moved the family to Sterling City (above

Paradise/Camp Fire). Sterling
City was a "company town"
operated by the Diamond
Match Lumber Company.
The "company" owned
everything.

The six kids grew up in a two-room house owned by the "company." I'm guessing the kids raised themselves with the guidance of the older sisters. When the woods shut down in the winter, the paychecks stopped, and scrip books would be drawn but only for

would be drawn but only for use at the company store. As Tennessee Ernie Ford said in his song, "You owe your soul to the company store."

My Dad went to work as a full-time logger at age 14 as a "whistle punk," the person who would relay the signals to the loggers working down the hill from the donkey engine. Logging was dangerous work. A cable that broke between the donkey engine and the logs would snap like a whip cutting in half any unfortunate worker in the way. Felling timber was just as hazardous.

From there it was on to the mill pond using a 16-foot pike pole to maneuver the logs from the pond into the mill. On to the "green-chain" chain, considered the toughest job in the mill, piling green lumber. On to fighting forest fires when the woods "shut down,"—up to three weeks

on a fire without a change of clothes or a hot meal."

At age 15 he moved down the hill to Chico. "Had a Model-T and less than \$2.00 in my pocket." Found a job at a service station where he could sleep in exchange for opening the station at 6 a.m. Showered in the gym at Chico H.S., went to class, and pumped gas from 4:30 until closing the station at 10 p.m. It was a six-day-a-week job, and he was not able to take part in any sports, which was one of his reasons for coming to Chico.

It took a long time to graduate from high school with this schedule, but he finally made it. I'm guessing he was probably 20 years old with the amount of working time needed to survive. He started a trucking business hauling freight up the hill to Paradise and Sterling City and dropped out of Chico State after a year. Later he managed a grocery store and then went to work for the Army in 1942 as an ammunition handler at the Sierra Army Ordnance Depot at Herlong, Calif.

Even without much of an education, he retired as the top civilian in charge of the Depot, just below the Commanding Officer. From ammunition handler to the guy in charge of one of the largest munitions bases on the West Coast. Quite a step.

Our family has been in this area for almost 120 years. I have a tough time with a person calling the area where my

father and family grew up "our territory." In reality, this person has probably never been up the 3,200 feet to the hills.

How far back are we going to take this line? We can play the century game back to the days of creation, if you want. Certainly, my Dad never had anything given to him. How many 15-year-olds do you see moving out and working their way through high school while working in a gas station and showering in the gym?

If Native Americans want a job in the tree removal industry—we have a million trees to bring down in the Camp Fire area—get some training and go to work. Demanding a job because of your heritage—good way to get someone killed.

The Indian War Of Idaho, Montana and Canada

by Bob Graham (Missoula '52)

n this article, I do not wish to get into much detail—just some of the highlights and interesting events.

I will bet that there are very few people who know the United States was in a war in the fall of 1974.

The Kootenai Indian Tribe passed a resolution Sept. 4, 1974, that notified the United States Government that the tribe was reclaiming its aboriginal lands located in northern Idaho and western Montana, as well as some lands in Canada. This resolution claimed 1,368,280 acres of land.

The government was given five days to comply with the return of these lands to the tribe, and lacking action by the U.S., a state of war would

exist between the tribe and the federal government.

This all came to a head Sept. 14, 1974, when the tribe notified officialdom that it was taking over the functions of government, including taxes, commerce, and complete authority over the entire scope of the tribal lands. This last part included all U.S. Forest Service grounds, and notified me, as I was the ranger there at the time, that I was to keep all of the Forest Service employees out of the national forest.

This created an immediate problem for me as we were in the midst of prescribed burning a pretty big chunk of forest acreage. This ranger district was selling and logging close to 50 million

44

board feet per year by 1974. This always added up to a heavy slash-burning season.

The community leaders held a meeting the night of Sept. 14 and appointed two committees to represent the local authorities.

The first committee was to be the contact for the tribe and to negotiate with it on all matters. There were four men appointed to this group, including the mayor, chairman of the county commissioners, the county extension agent, and me.

The second committee was the law enforcement group, and I was also appointed to that group. During the war, we had one-third of the Idaho State Police (ISP) stationed here as well as a whole bunch of other federal and state law enforcement officers. This group usually met soon after the negotiating committee met with the tribe.

We put up all of the State Police officers in the basement of the local hospital. For the security of these officers and their numerous vehicles, the ISP stationed a couple officers on the hospital roof. Remarkably, two burglars chose one of these nights to burglarize a home directly across from the hospital, under the full view of the two roof officials. It was the culprits' last activity for some time.

The tribal office was downtown in Bonners Ferry, Idaho, directly across the street from the sheriff's office. The sheriff's office was an old frame building, and the second floor was actually an attic with a window facing the tribal office.

Throughout the conflict, law enforcement officers with arms and cameras kept watch on the tribal personnel from this attic.

The following is a partial list of the demands the tribe presented to the negotiating committee:

- 1. Tribe would set up four roadblocks on the highways and charge fees for drivers and vehicles. Our response to this was that the governor has declared that anyone stopping traffic would be arrested. The tribe said the state has no authority any longer to arrest.
- 2. Do not harvest crops and bring in all livestock. Later during the war, this was modified to allow small farmers to operate, but large farmers would require tribal permits.

- 3. No Forest Service activities on the aboriginal lands. This was modified to allow us to manage the burning, but nothing else.
- 4. Lumber mills would not accept logs. Small loggers could continue to log, but not deliver logs to the mills.
- 5. Clear title of 128,000 acres transferred to the tribe and fair compensation for each of the original aboriginal lands of 1,680,000 acres.

Most of the demands were modified or clarified somewhat through the negotiation process.

The tribe would call me two or three times a day and night and ask for a meeting with the tribal officers and our four negotiators. We would meet in the tribal offices and afterward meet with the other government officials and relay our concerns of meeting.

Foremost for the tribal meeting was the need to get to the broadcast burns and other USFS activities. The tribe allowed us to attend to whatever was presently burning.

Another high priority was to stop the highway blockages. The blockages were removed, but the signs remained up and the fee was still charged.

Most of the days of the war were occupied by many meetings, including a daily phone call between me and the Forest Service Chief's office for Bill Longacre. Much of the Chief's meetings were concerned with the official USFS participation in the war.

In 1974, the USFS was just beginning to form its own law enforcement cadre—more or less a SWAT-trained, fully armed force led by Bill Longacre. About 15 of these officers were assigned to Bonners Ferry to protect the ranger station.

I had to make certain all of the Forest Service employees left the station by 5 p.m. Then Longacre's men would move in and hide in each of the stations structures, including the ranger's house that my family and I occupied.

The chief and his staff decided we needed the SWAT team, but no one was to know we had them present. I was not even to tell the law enforcement group nor any of my employees.

Our instructions from the Chief were somewhat of a surprise. If the tribe or their representatives were to move on the ranger station, we were

to show force, but not to confront them. If the tribe persisted in the threat, I was to let them have the station.

I reminded the higher-ups that my family lived on the station. The position of the Forest Service's Washington office was to let the tribe have my dwelling, also.

The second of the established committees, the law enforcement group, had identified possible targets for the tribe to overtake to gather more national attention.

One of the highest priority targets was the ranger station. And after a couple days into the war, some of the federal officials participating thought the tribe would accelerate the media attention by taking a hostage, probably one of the four negotiators, and more than likely me, since I was a lowly federal official.

One of the federal officials suggested they give me a hidden weapon to carry at all times. I did not think that was a good idea and turned down the offer. They said they could hide the weapon on me where no one would know I had it. I again refused their offer, but ever since, I've wondered where they were going to hide it.

While all this was going on, I had some of the leadership of the law enforcement agents over to our house for tea and crumpets late one night. Our oldest son, Bill, and his best friend, Gary Aitken, who happened to be a Kootenai tribal member, drove up in a pickup and pulled into our driveway. Bill jumped out and ran up our sidewalk and came into the house.

Very shortly after Bill came in, numerous armed officers charged in the front door, thereby ending my tea session.

The tribe really won the war. The politicians got involved and made concessions such as recognition of their sovereignty, some acreage, some homes, and access to government funded programs, such as grants through the Environmental Protection Agency and Northwest Power funds.

RECORDING SMOKEJUMPER HISTORY

Rescue Mission In The South Fork Primitive Area

by Jack Demmons (Missoula '50)

(Originally published in the October 1994 edition of The Static Line.)

uring Wednesday and Thursday, Sept. 17-18, 1941, there was high drama in the South Fork Primitive Area of Montana. (That area is now part of the Bob Marshall Wilderness Area.)

Two Travelairs of the Johnson Flying Service, based out of Missoula, were standing by at the Big Prairie Ranger Station's landing strip. A rescue mission was in progress.

A call had been received in Missoula on Sept. 17, stating that a woman in a hunting party had been shot by another hunter – from a different

party. (The call erroneously stated the victim was at the ranger station. She was actually about 20 miles away.)

Veteran pilot Bob Johnson took off from Missoula's Hale Field at 6 p.m. with **Dr. Leo P. Martin** (MSO-40) and nurse Cathryn Ward. (The Big Prairie strip was about 75 miles northeast of Missoula.)

Dr. Martin had trained at Missoula under Frank Derry (MSO-40) and had also taken some training in parachuting at Moose Creek in the Nez Perce National Forest. He was not a smokejumper, but had taken parachute training on his own so as to be jump-qualified for rescue operations. (Medical journals in the United States referred to him as the only "jump doctor" in the nation at the time.) He was a native of Coram, Montana.

Upon landing, they found that the injured

woman, Barbara Streit of Missoula, had been shot about 20 miles from the ranger station, in the Young's Creek region. She had been shot at a distance of 50 yards by a 180-grain, soft-nosed, hollow-point bullet fired from a 30.06 rifle. The bullet had gone through both knees. Miss Streit had been preparing to enter Montana University upon her return from the hunting trip. She would have been a senior.

The report received at the station said she was in critical condition, suffering from loss of blood and was in shock, and that the hunting group was moving her down the trail. Dr. Martin, nurse Ward, and several employees of the ranger station took off in the darkness to try to meet them.

In the meantime, Bob Johnson contacted Hale Field and stated that smokejumpers were needed, since the injured person was a long distance from the ranger station. A 60-mile round trip was to be taken to Nine Mile, west of Missoula, and back in order to secure parachutes and jump gear.

Very early in the morning of Sept. 18, Dick Johnson was airborne in another Travelair, along with Barbara Streit's father, Norman C. Streit, and smokejumpers Karl Nussbacher (MSO-41), Roy Mattson (MSO-41), Bill Musgrove (MSO-41) and Wag Dodge (MSO-41). It was raining in the South Fork area and conditions were such that it was impossible to drop the jumpers. They landed at Big Prairie and shortly headed up the trail.

In the Young's Creek area, members of her hunting party had slowed the loss of blood and applied splints to both legs. Miss Streit was placed on the rump of one of Tamarack Lodge's pack horses, Old Sylvia. With a man on each side steadying her – with legs held straight out in front – they started down the long trail. Dr. Martin and others in his group met them 18 miles from the Big Prairie station.

Dr. Martin administered first aid, and once again Miss Streit and the rescuers headed to the northwest. They had to stop at the Hahn Creek Guard Station since Barbara Streit had taken a turn for the worse.

Dr. Martin gave her what was called in those days a "canned-blood transfusion." This was at 3:30 the morning of September 18. At 7:30 a.m. the group started out again. The going was slow along a slippery trail, and they had to cross the

rain-swollen South Fork River. Dr. Martin said later that Miss Streit never once uttered a single cry.

The four smokejumpers and Norman Streit came across the party seven miles from Big Prairie and gave assistance. Then, three miles from the airstrip, they met a Forest Service mule-drawn, rubber-tired cart, to which she was transferred. Arriving at Big Prairie, Barbara Streit was quickly placed in Bob Johnson's Travelair. The nurse and her father went along. The smokejumpers boarded Dick Johnson's ship and both groups took off in the face of a crosswind, with Dick's ship acting as escort along the route to Missoula.

At Hale Field she was taken in an ambulance to a local hospital, where doctors removed about 200 bullet fragments from both knees. She recovered and lives in Missoula today.

The Great Falls *Tribune* commented Sept. 19: "The saga of a fearless girl, an intrepid doctor, dauntless airmen, and sweating rescue workers ended at Missoula's municipal airport this afternoon ... thus ended a 95-mile trip (20 by trail and 75 by air) ..."

Among the jumpers, Wag Dodge survived the Mann Gulch Fire of 1949 and passed away in 1955. We do not know the whereabouts of Karl "Bear Wrestler" Nussbacher (he later changed his name to Glades), Roy Mattson or Bill Musgrove.

Dr. Martin joined the Army Air Corps in 1942 and became head flight surgeon for the base at Walla Walla, Wash. He was a captain and taking flight instructions. He and his instructor pilot were shooting practice landings. Dr. Martin's wife – along with her parents – was watching.

Suddenly the cabin trainer hit a power line, exploded, and crashed in flames. Both pilots died. Dr. Leo Martin was later buried at Missoula.

Dick Johnson died in March 1945 in the crash of the Johnson Flying Service Travelair he was piloting south of Jackson, Wyo., while taking part in a game survey. Bob Johnson passed away in December 1980.

It has now been 53 years since that rescue out of Big Prairie. The Young's Creek area is still a primitive region and the Big Prairie airstrip has been closed for a long time to civilian aviation. The roar of Travelair engines over the South Fork Primitive Area has been stilled forever.

Death Wish

by "Swede" Troedsson (Missoula '59

n 2016 I attended a memorial service in Dillon, MT, for Bill Murphy (MSO-56). When Bill retired from the USFS, he became active in the NSA Trails Program, and was a strong supporter of NSA.

Several former smokejumpers who were active in the Trails Program came down from Missoula to attend the service. Among them was **Roger Savage** (MS-57). Roger had retired as a pilot with a major airline. Roger told me a story about **Craig Smith** (MSO-57):

Craig had been a college classmate of mine. When Craig had been my roommate, he recruited me into the smokejumper program. In 2000 Craig died of Parkinson's disease at the early age of 62.

Craig wanted his ashes scattered on a certain mountain peak in the Bitterroot Mountains that he and Roger climbed when they attended college. Craig and his first wife, Mary, divorced and Craig remarried. Craig's second wife asked Roger if he would rent an aircraft and fly her over the peak that Roger and Craig climbed so she could scatter Craig's ashes on the peak.

Roger consented. He rented a plane and as they approached the peak, the widow inquired as to the name of the peak. Without thinking,

Roger replied "St. Mary's Peak."

I wonder what crossed the widow's mind when she found out that the peak has the same name as Craig's first wife.

The last time I revised my will, I had my attorney include the name of a high mountain lake where I want my ashes scattered. Lake Geneva is just next to the Continental Divide and flows south and down into Hamby Lake. I have visited over 150 lakes on the Beaverhead N.F. Lake Geneva is my

favorite. The view is spectacular, and the lake contains beautiful Yellowstone Cutthroat fish.

When my attorney inquired as to why I selected that lake, I described the spectacular beauty surrounding the lake and that there were mountain goat beds on the north shore. My wish was that my ashes be deposited on the goat beds. I would consider it a great honor to have a mountain goat take a dump on my ashes.



L-R: Cliff Hamilton (CJ-62) and Bob Stockman (FBX-67) visit Lampasas memorial for Darrell Eubanks (IDC-54) and John Lewis (MYC-53). (Courtesy C. Hamilton)