President's Message
George Durkee

As all now know, in early January Ranger Margaret Anderson was killed in the line of duty at Mount Rainier National Park. As with all ranger deaths, hers was an emotional blow to all of us and most especially to her family, friends and colleagues.

In the face of that despair, we feel inadequate in what comfort we can offer; but what we can do, we will. There is, though, some comfort in the solidarity and support from throughout the law enforcement community. At our request, both the Grand Lodge and Virginia Lodge sent their condolences as well as donated to the fund set up in her memory. If any of you have not yet donated or sent a card, the contact information posted on the website.

Our deepest sympathies go out to her family and friends. We also want to recognize the bravery of the responding rangers from Mount Rainier and other law enforcement agencies. In addition to their personal sense of loss, there might also be a feeling that they didn't do enough to save her, which adds yet another unwarranted burden of grief and trauma. We must always make sure we also extend support to the survivors of such tragic incidents.

Lodge Updates
It has been a busy last few months at Lodge Central. As he announced on our website, Duane Buck has stepped down as acting President following the end of John Waterman's tenure last spring. Duane has also moved on from his job as webmaster after many years of dedication to creating and maintaining a great web site. Ours was one of the first websites created for a law enforcement organization and Duane gets all the credit for that.

So I have now stepped in as both President and webmaster and, along with Trustee and Treasurer Randall Kendrick and Membership Services Coordinator Paige Meier, will run day to day operations of the Lodge. Randall and I are co-founders of the Lodge and look forward to continuing the excellent tradition of helping fellow rangers begun in the late 1980s in Yosemite.

For those of you with long memories, it started even before that when Randall, Mead Hargis, Charlie Fullam and I established the National Alliance of Park Rangers and Firefighters in 1985. In 1988 we morphed into the Ranger Lodge of the Fraternal Order of Police.

As a fraternal organization, one of our primary responsibilities is to help fellow rangers on an individual basis. This takes up a huge amount of our time: helping rangers with individual questions about what to do when an adverse personnel action is taken against them or they have a housing or medical issue that isn't being fairly resolved; helping rangers concerned about poor radio communication or other safety issues in their park; or any number of issues where we are frustrated by a lack of response from managers to important issues. We always need help and expertise in these efforts, so send us a note or call if you've got some time to help.

Creating A Hierarchy of Ideas
As always, of course, we want to continue our efforts to improve training, equipment and operational safety for law enforcement rangers. To do this, we need to work to make the NPS more responsive to the suggestions, ideas and innovations from field rangers. I recently came across Congressional testimony from former DOI Inspector General Earl Devaney:

Mr. Chairman and members of the committee, I have served in Federal government for a little over 32 years. I have never seen an organization more unwilling to accept constructive criticism or embrace new ideas than the National Park Service. Their culture is to fight fiercely to protect the status quo and reject any idea that is not their own. Their strategy to enforce the status quo is to take any new idea, such as a law enforcement reform, and study it to death. Thus any IG recommendation or, for that matter, Secretarial directive, falls victim to yet another Park Service workgroup charged by their National Leadership Council to defend the status quo from those of us who just do not understand the complexities of being a ranger.

Earl Devaney, 2003: U.S. Borders: Safe or Sieve?

Has anything changed since then? Last Fall, there was a replay of an interview with Steve Jobs, co-founder of Apple, following his death. He said that he attributes much of the success of Apple and Pixar to making sure that the hierarchy of ideas in his companies was not the same as the hierarchy of management:

If you want to hire great people and have them stay working for you, you have to let them make a lot of decisions and you have to, you have to be run by ideas, not hierarchy. The best ideas have to win, otherwise good people don't stay.
And finally, there was an article late last fall in Morning Report from the office of Workplace Enrichment (who knew we had such an office?):

The annual “Best Places to Work in the Federal Government” rankings were recently released, and, disappointingly, our ranking dropped to 163rd [out of 229] from the 2010 ranking of 139th.

Even the 139th ranking seems a fluke – the NPS ranking for the last 10 years has hovered mostly around 160th or so! (See the rankings: tinyurl.com/bestplacesnps).

How is it that job satisfaction in the National Park Service ranks much lower than, say, Bureau of Prisons (64th)?

My point (at long last) is that these issues are all directly connected. When the Best Places rankings are broken down, we see that in the category Effective Leadership - Empowerment our ranking is 170th. This category “measures the extent to which employees feel empowered [...] and how satisfied they are with their involvement in decisions that affect their work.” Yet NPS employees feel strongly that we’re working in the right place. In the category Employee Skills/Mission Match our ranking comes out at 77th.

This is pretty amazing and more than a bit depressing. The survey confirms that the incredible dedication, intelligence and idealism of our employees is routinely blown off by too many NPS managers. This is at the core of what’s wrong with much of the dissatisfaction with NPS and how employees are valued and treated.

NPS is a top down hierarchical structure in every aspect of operation. Organizations must, necessarily, have a top-down management structure to function – that’s the idea. But as Jobs points out, a successful management culture actively encourages innovation and ideas from all levels of its employees and provides a structure to make that happen.

In the NPS, the hierarchy of management is the hierarchy of ideas. Policies and initiatives rain down on us from above while ideas and innovation from the field are neither valued nor encouraged. At every level – from first line supervisors to higher level managers – the reaction to “How about we try this?” is too often met with, at best, indifference and sometimes even outright hostility.

When employees have contributed to a policy or plan, we are invested in its successful outcome because we helped create it.

As Devaney observes, this is deeply rooted in our corporate culture and affects all aspects of our job. Why should field people pay the slightest attention to yet another mandate coming from above that they had no hand in shaping and, likely, has little relevance or understanding of the problem it purports to address? When employees have contributed to a policy or plan, we are invested in its successful outcome because we helped create it. When there is no “buy in” why bother?

In contrast to the timid “round up the usual suspects” actions suggested by the Office of Workplace Enrichment, solutions will not come through bullet points, action verbs and dense jargon. Fundamental change is needed in the existing corporate culture.

Ideas, innovation and imagination have to be encouraged at all levels, discussed in a mutually respectful atmosphere and, where reasonable, implemented. And it’s the discussion that’s a vital part of this process. That’s how an initial thought evolves into a good idea, then a plan and, maybe, a better way of doing something. Our ideas are shaped and improved by discussing them with others.

The founding of the Ranger Lodge was based on the goal of giving field rangers a voice in how we do our jobs. Going back to our beginnings in the mid-80s, we advocated for ballistic vests, better tactical training, safe staffing levels, and modern duty gear. It is amazing that every proposal – every single one – was met with opposition from every level of management, from Chief Ranger to WASO. This was simple and basic stuff yet it took 20 years to gain even minimal acceptance.

Experience and the Best Places to Work survey confirm that absolutely nothing has changed and that employee frustration and dissatisfaction permeates every level and division of the National Park Service. There are some truly great supervisors and managers out there who routinely encourage input into operations from staff and who are open to trying different and more effective ways of doing things. But such people are too rare and, as a result, the NPS continues to live in some strangely disconnected world, paralyzed by timidity, deaf to the suggestions of its employees and blind to even the need for change.

So in addition to the Lodge continuing to advocate for specific improvements, we need to go at the heart of the problem. Emphasis now needs to be on a fundamental change in how we become an agency that seeks out and rewards innovation and ideas from the field: a mutual conversation.

Potential models are out there for implementing greater employee influence in operations. Recent introduction of the so called Highly Reliable Organization (HRO) workgroups that Fire is using and Operational Leadership training, when effectively used, give field employees a direct voice and influence in operations. Although narrow in scope (safety), these templates can be used throughout the Service as a basis for more effective field influence in how we run the National Park Service – both day to day operations and long-term goals.

Other agencies, such as NASA and the US Coast Guard have successfully changed their culture to encourage and adopt suggestions from the field. In future issues, we’ll look at specifics in how some of these models can be applied to the NPS.
Because the lead time between recognizing a potential problem and implementing solutions is, at best, around five years, we need to begin considering what the next generation of weapons will be for rangers.

Over twenty years ago, the National Park Service did a good thing and made the transition to semi-automatic pistols. The evaluation process was well conceived and conducted and, by and large, commissioned rangers are satisfied with the weapons available for duty carry.

Although there have been no reported problems, now is a time to begin considering a plan to retire and replace these pistols.

We need certified armorers with all the training and equipment provided them, to regularly inspect and maintain these pistols. It's great that rangers have the weapons, but timely and expert inspection and maintenance is needed.

While policies are in place to require service, there is no central database to ensure that this service is actually performed. Knowing very well how some managers choose to selectively comply with policy, this important safety procedure needs to be a national priority.

RM-9 also requires supervisors to inspect the equipment of employees. There is no requirement for this to be documented so, of course, there is no proof that this important safety measure is conducted. How often has your supervisor looked over your gear to ensure it's serviceable?

Every ranger needs to be confident that the equipment he/she is carrying is fully functional, and supervisors should replace old equipment.

The other problem follows this: the lack of a Servicewide policy for retiring these now 20 year old pistols and replacing them. When the manufacturer is shocked to find that pistols as old as ours are still in service, this is a clue. When parts are no longer available, this is also a clue that these items have a finite lifespan. In the next few years, seasons will soon have pistols that are older than they are, with an unknown service history. This is not acceptable.

The NPS should replace the oldest of these firearms immediately then develop a plan to ensure that our weapons inventory never again gets so old. In addition, we need to ensure that the maintenance history of all firearms is centrally documented.

Ten Years Later: A Review of the IACP Report on NPS LE
Randall Kendrick

This report was submitted by Randall Kendrick, in consultation with several knowledgeable NPS managers with expertise in the history of the International Association of Chiefs of Police (IACP) report of 2000. This report was requested by NPS to review its LE program and make recommendations for change.

Some may quibble with a few of the conclusions, but it's undeniable that the momentum of reforms begun as a result of this report have disappeared and NPS is, once more, treading water with respect to significant improvements in our LE program.

Members can see both the Executive Summary and the full report on the Lodge website: rangerfop.com under Members > Reference Library > Reference Documents.

In 2000 — in the aftermath of the murders of three NPS rangers in the 1990s — the International Association of Chiefs of Police (IACP) was commissioned to study law enforcement in the National Park Service and make recommendations for any program deficiencies found as a result.

Their report, along with reports on other DOI bureaus, became a blueprint for a review of the NPS law enforcement program by the DOI Office of the Inspector General, and subsequent reform recommendations to be implemented by the Department.

In the report, the IACP stated “NPS is likely to require the better part of the next decade to lift the law enforcement function to the level and status it deserves,” and “Rangers should remain patient.”

Now, after 12 years of relatively patient waiting, it’s time to take a look at what has changed in NPS law enforcement, and what has not.

The Top 10 IACP recommendations were:

1. Create the position of Associate Director for Emergency Services and Law Enforcement.

The NPS has indeed created this position. In addition, the position supervises Wilderness, Risk Management, Wildland and Structural Fire.

The status of law enforcement within the NPS Directorate has varied through the years, depending on the personalities involved. Overall, however, the law enforcement program has failed to mature and develop. The fire program has a division chief and branches for wildland fire, structural fire, aviation management, communications and education, and information technology. Law Enforcement has a division chief (at this writing out on detail) with branches for Investigative Services (vacant), Law Enforcement Operations (vacant, with the incumbent acting for the chief), and Emergency Services.

Comparing LE to Fire may be unfair to some — as fire is well funded. The NPS could choose to fund LE to match the funding of Fire if it similarly valued LE as it does fire.

While we’re no fan of central office staffing, it is odd that the national law enforcement program office is smaller than that of some regions.
In short, moving the words “law enforcement” to the top on the organizational chart, in and of itself, doesn’t necessarily further the role of law enforcement in the NPS, especially if the person in charge of law enforcement must divide their time with the health inspectors of Risk Management, along with Wilderness and Fire. Accomplishments need to be evident in actual results.

2. Create a tiered structure of law enforcement goals, objectives, and effectiveness measures. This hasn’t been done in any meaningful manner. The Incident Management Analysis and Reporting System (IMARS) is not yet in place, and the successor to the Visitor Management-Resource Protection Assessment (VRAP) is not in operation either. There is no national law enforcement plan or strategy.

3. Ensure that law enforcement objectives are reflected in the NPS strategic plan. This hasn’t been done.

4. Revisit park superintendent law enforcement accountability requirements and protocols. There haven’t been serious significant changes in this aspect of the NPS LE program. Yes, the NPS has improved its use of background checks for superintendents. This is much more due to post 9/11 embarrassment and higher standards from DOI than from its own efforts. There are still multiple issues in NPS with management of investigations.

5. Reestablish a system of strict and frequent park law enforcement audits. The NPS hasn’t done this. There is nobody in WASO that does this, and regional performance varies from region to region. With no national standard, and no requirement for regions to report to WASO, there is no audit program, certainly not one that is strict or frequent.

6. Increase the current complement of law enforcement rangers by 615, the number determined to be needed by the VRAP process and reported to Congress.

WASO’s response to the 615 number was to scrap the VRAP program rather than try to meet the goal that it set. WASO did implement a “no net loss” policy, which is far different than an IACP-recommended increase of over 25% LE rangers.

Over the last 12 years, the NPS has added additional park units without a plan to add rangers. The NPS has placed a greater reliance on seasonal staff, when at one point direction from DOI was that all seasonal law enforcement must go.

7. Develop a data-driven plan to justify allocation and scheduling of new rangers. This didn’t happen. First, there are few new rangers, and second, there is no national or regional staffing plan or strategy.

8. Increase productivity of current and future rangers through new technologies, joint efforts with other agencies, and other productivity enhancing initiatives. If progress has come on this front, it has come from the efforts of the Lodge and individual rangers, and not as a concerted national effort. As we pointed out in the President’s Message, NPS efforts to adopt or encourage new technologies – or anything new – are abysmal.

9. Establish ranger recruitment, selection, promotion, and performance evaluation policies and programs that conform to professional law enforcement standards.

The good news is that the NPS has these standards. The bad news is that they are confined to the US Park Police and not to rangers. For rangers, there is no national recruitment policy or people to implement it – the seasonal academies are in charge of that.

Seasonal academies are in charge of the selection of students who will become future rangers, once they pay the cost of their own tuition. Promotion and performance evaluation in the ranger ranks is the same as everyone else in the NPS.

A clear path to becoming a permanent ranger with the National Park Service is still a “Byzantine nightmare,” as the Lodge described this process in 1986. Yes, that’s right, 1986!

10. Ensure that every ranger has or has access to a full complement of essential law enforcement equipment and technology.

It’s bizarre to think that although Tasers have been in the NPS for over a decade, their approval in a park is at the will of the superintendent. Although the NPS changed from revolvers to pistols 20 years ago, it never bought replacements for these aged firearms and no plan is in place to do so – nor is it being contemplated, as near as we can determine.

Reestablish Momentum of Reforms

There is no question that NPS has made some improvements in standards, training and equipment as a result of this report, pressure from the DOI office of law enforcement, congressional pressure and the Lodge.

Once minimal compliance with the IACP report was reached – and external pressure dropped off – progress has been slow to nonexistent. It’s time to revive efforts at reform and improvement and continue the basic recommendations made by that report.

Seasonal Training and FLETC

The Lodge has learned of a possible plan by WASO to create a “bridge” course for graduates of seasonal academies, so that these employees would not need to take the full basic training course at FLETC.

This radical change in basic training may indeed have merits, but also poses safety concerns. This plan deserves wide discussion and research before being implemented. None of this seems to be going on, and the Lodge calls for greater transparency and involvement of the field in the process.

With nothing made public or distributed to NPS employees, we have to oppose this contemplated change. Without input, the track record of the NPS management has consistently been to the disadvantage of the safety of commissioned rangers and detrimental to carrying out our primary function.
In addition, word has reached us that NPS is investing even more money in seasonal academies and taking it away from ranger advanced training. So basically they are taking limited funds from current employees (in-service instruction) and giving it to non-employees (seasonal academy students).

Streamlining and coordinating training between seasonal academies and FLET C should not come at the expense of cutting training programs for current employees.

**Lodge 800 Number:**
**Call for Advice or Assistance**

The National Park Rangers Lodge maintains an 800 number for its members: 800-407-8295. We ask that you call between 10AM and 8PM Eastern time. Randall Kendrick staffs the phone and is usually available to answer seven days a week. In the event you receive a recorded message, leave your name and phone number and you will receive a return call within 24 hours.

The 800 number is for members who are experiencing a problem on the job and think the Lodge may be able to help with advice and networking to get you the information you need to defend yourself. You are also encouraged to call if you have questions about a membership problem or anything else. We will do what we can to assist you. We don’t want any member to feel isolated.

In the 20 years we’ve offered this member benefit we have had no breaches of confidence: Your name will not be revealed and actually, most of the Lodge officers will not know you called. Helping members in the strictest confidence is the way the Lodge has always worked and only some of those actively researching your problem will know your name and park.

You can use this Lodge benefit without fear of management finding out you have called and are getting assistance.

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**Website and Tech Notes**
**George Durkee**

**New Electronic Newsletter**

Recently, the Ranger Lodge has begun distributing time-sensitive news using an electronic newsletter: *The Email Protection Ranger*. It’s turned out to be a very successful way of getting news to members.

We used it to draw attention to the stunningly clueless observation of a United States Congressman who said:

> Almost no Federal law enforcement today is physical in nature. Early retirement in most Federal law enforcement can no longer be justified. Working as a waiter or waitress is more physically demanding than most Federal Government positions for which we now grant early retirement.

We also used the electronic newsletter to make sure members received timely information on how best to honor Ranger Margaret Anderson.

The *Email Protection Ranger* is fast, timely, uses minimal resources and, not least, is free from MailChimp. The only disadvantage is we don’t have everyone’s email address. If you have **not** received any of these emailed newsletters (3 to date), that means we **don’t** have your correct email address.

If you’d like to receive the electronic newsletter, as well as other notification from the Lodge, please send your email address to: rangerfop@sonic.net.

We won’t clog your Inbox with newsletters or junk mail. We envision no more than 8 or so a year as well as an emailed reminder to renew your dues. We will, of course, continue to publish the print edition of *The Protection Ranger* to make sure we reach all of our membership with news.

**New Lodge Website**

We hope many of you have already visited our newly redesigned website. It has a cleaner look and Forum (no more blinking ads!). The new site offers some more flexibility in what we can offer but does have a bit of a learning curve with the “back end” that runs it. Which is to say I apologize for some glitches some members have experienced.

**Ranger Photo Gallery**

At the suggestion of a member, I’ve started work on a photo gallery for the Lodge website. So far, I’ve posted a *SAR Photo Gallery* with the first set of photos of a SAR I was involved in many (many!) years ago.

I think it would be great if we also have photo galleries for Law Enforcement, Medicals, Fire, Scenics, Patrol and In Memoriam for rangers who have died in the line of duty. These can be training or actual incidents. Patrol would show us in all aspects of our daily work: road patrol, river, backcountry & ski patrols.

The main photo galleries would be open to the public. It’s vital we do more outreach so that every time there’s a serious law enforcement incident (for instance) the public – and even some NPS managers – don’t gasp and say: “What, you carry guns? You arrest people?” This is not in any way to suggest we want photos of drunks being yanked out of vehicles (though they’d be published), but we do want to show rangers in all aspects of our job and with full duty gear, where applicable. As important, it’s just a nice thing to be able to show the public what we do.

If there’s demand, I could also start a Members Only section that would show more sensitive photos such as marijuana ops and other incidents. So, start going through your files and send me photos of rangers at work.

It’s easy to do. You just email each individual photo to: face33run@photos.flickr.com

- In the **Subject heading** put the title you want the photo to have.
- In the body of the email, include this information:
  **Description:** (What’s the photo about; who’s in it?)
  **Where:** (Where was it taken?)
When: (Date)
Photographer Credit: Who took it? You must, of course, have permission to send us the photo.
Contact Email:

Registering for the Site
One glitch I just discovered is that after a member registers with the site, we’ve got to approve them to make sure they can access the Members area. We had thought this was automatic with the registration but, oops, it’s not and I apologize that some of you may not have been able to see or access the Members Only area and, most importantly, the discussion Forum.

Many members may not have realized this because without the Administrative approval from the server side, they don’t even see the Member menu. So if you’ve registered and have been wondering where the discussion Forum is, log in and try it again. Everyone has now been approved who registered and the Members dropdown menu should now show for you.

Also, some members got confused when they join the Lodge online. There are two separate online steps:

Joining the Lodge and then Registering for the website.

Finally, a few people have reported problems finding the Home page and Forum after logging in. Here’s how to do it all:

To Register for the rangersfop.com website
1.From the Home page, go to the navigation bar on the left and click on: Current Members: Register for Website.
2.Fill in the boxes: Make up any username you want. Write it down! Fill in the email address you want your automatically generated password to be sent to.
3.Fill in your first and last name so we can confirm you as a paid member. This is important. If you don’t, it will delay getting full access to the site. We have to confirm you’re a paid member to use the Members area.
4.Fill in the Validation Image that tells us you’re not a cyborg (or, anyway, not a very advanced one).
5.Then click Register. A password will be emailed to you.

To Login and Access the Members Section
1. From the Home page, in the upper right of the page, click on Member Login box.
2. Fill in your username and, if this is your first login, the password that was emailed to you. You can check Remember Me if this is your home computer and you want the username to be automatically filled in when you return.
3. Click the Log In box
4. You’ll be taken to the Control Dashboard. This is where you can change your user profile, settings and password.
5. If this is your first login, click on Profile on the left navigation bar. Otherwise, in the upper left click on United States Park Ranger Lodge to be taken to the Home page.
6. From the Profile page you can fill in your personal information. Scroll down to also change your password to something easier to remember. We also recommend that you check both boxes:

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7. With those boxes checked, next time you log in you’ll get a bar at the top of your screen allowing you to Edit My Profile (a dropdown from your user name) or Visit Site to go directly to the Home page.
8. When a new registration comes to the Lodge, we change the user settings so you have access to the Members Only section, which includes the discussion Forum. This may take a day. You won’t see the Members menu and won’t have full access until this happens.

Whew! It’s easier than it sounds. Really. So if you haven’t already done so (or did and got confused, then left) we hope you’ll register and join this community of your fellow rangers. The discussion section is starting to pick up users and people exchanging news and commenting on stuff.

Many thanks to all of our members who are actively participating in the Lodge by getting their dues in on time, letting us know when their address changes, and staying in touch. We always like to hear from you.

Thanks, too, to the many members who continue their membership once they retire. And a HUGE thanks to all of you that made a donation to the Lodge. They have been a great help to your fellow members in need and in day to day operations of the Lodge. Your generosity helps us help you and your colleagues.

The 2012 membership cards were sent out in early January. If you didn’t receive yours it means that your dues have not been paid. If you’ve recently received a renewal notice, please send in your dues soon. Once we receive them we will send out your membership card.

Our records show that we still do NOT have valid email addresses for many of you. If you received a notice about this with your membership card, please send us your email address ASAP. The Lodge now sends 2nd and final renewal notices by email only.

We are also sending out important notices and occasional electronic editions of The Protection Ranger via email. If we don’t have your email address, you will not receive these. Thanks!

For 2012, we’ll be asking members for a voluntary additional dues contribution of $10. We have not raised dues in over 10 years. The recent expenses of the web redesign and charges from Passman and Kaplan for legal advice for several members has run our bank account down a bit lower than we like, with very little cushion for unforeseen expenses. If you can spare an extra
few dollars when you join or renew, we’d really appreciate it. We want to emphasize that this is entirely voluntary. You may, of course, still join or renew at the regular rate.

Have a safe 2012.

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**Help The Ranger Lodge: Participate!**

The Lodge is entirely membership driven. Other than the Membership Services Coordinator, we have no paid staff or outside help other than rangers. We need your participation to keep us running and addressing issues that you or your colleagues think are critical to doing our jobs.

If you’ve got an issue you think needs attention, call or write us. Even better, suggest how it might be solved and become involved in that solution.

If you or your park have tried different techniques, programs or tactics that you think may benefit your fellow rangers, send us a note and we’ll publish it in *The Protection Ranger*. If it’s a critical warning or tactic, we’ll send it to our email list.

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**Using GIS and Technology to Improve Job Safety**

George Durkee

As an organization and as individual rangers, we need to take a closer look at how we can make our jobs safer. We all go around telling each other to “Be Safe” and managers tell us to “Work Safely” and put signs all over the place emphasizing safety, but I’m not sure they have much effect.

The continuing dismal accident rate of the NPS (and other land management agencies) would indicate that these exhortations just become a white noise background as we move serenely about our daily tasks. Without substantive changes made in how we integrate safety into our NPS culture, I don’t see this improving. A review of SAIT reports over the years shows a depressing similarity in the cascade of events that lead up to a serious accident. These are accompanied by strikingly similar recommendations made by boards of review over the decades.

While the death of Margaret Anderson reminds us of the dangers of the law enforcement aspect of our jobs, we face greater risks from accidents. A number of accidents have involved rangers and other personnel working in remote terrain:

- **In 1996** ranger Randy Morgenson left from his backcountry ranger station in Kings Canyon on a multi-day patrol. He did not check in by radio as was required by protocol. The area he worked in had (and still has) extremely poor radio coverage. When he didn’t check in the following day another ranger was sent to check his station and found a note saying he was gone on patrol, but giving no route. A large search was started on the 3rd day of not hearing from Randy. No trace of him was found in that search or one carried out the following year. His remains were found 5 years later by a trail crew.

- **In July of 2005**, Ranger Jeff Christensen left on foot for a backcountry day patrol. When he did not return that day, an intensive multi-day search was carried out and he was finally found over a week later. He had died of a head injury though likely lived for an unknown period of time after the injury.

- **In mid-August of 2010**, a contract fixed-wing aircraft with three NPS researchers and the pilot were reported overdue after leaving their worksite in Katmai National Park. A major search followed but no sign of the aircraft was found until late September, when some wreckage was found on a beach. Neither the rest of the aircraft or any remains have ever been found.

- **In late August of 2011**, an off-duty research scientist at Glacier National Park took a solo hike. When he didn’t show up for work on Monday, a search was begun. His car was found at a trailhead and his body a week later after an intensive search effort in rugged terrain.

- **In late August of 2011**, an NPS research team working in remote terrain of Sequoia and Kings Canyon National Park was descending a steep icy chute at 12,000 feet when one of the team fell in an uncontrolled slide for several hundred feet. When he came to a stop he had a severe ankle injury. One foot had partially amputated and he was bleeding heavily.

His own efforts and those of his team stopped the bleeding but the injury required direct pressure throughout the night to maintain control. It was late in the day and efforts to call for help by radio and cell phone were unsuccessful – NPS radio coverage in the immediate area was non-existent.

The group did have an emergency satellite locator beacon which they immediately activated. Unfortunately, it had not been set up correctly and they had not been briefed on its proper use. One of the team quickly began traveling the area and ridges looking for either a cell phone connection or radio connection, which he eventually established and called for help. Because contact was not established until last light, help could not get to them until the next morning. The researcher was evacuated by helicopter. His lower leg had to be amputated as a result of his injuries.

Although every accident has unique aspects to it, what has struck me over the years is, in these examples and others with better outcomes, how many are exacerbated by poor radio communication and the lack of knowledge of an exact itinerary of the missing people.

After the Katmai crash, Director Jarvis issued a memo requiring flight following for all aircraft in Alaska and said the same was “being considered for Department-wide implementation.”
I would go a step further and require providing fail-safe communication and remote tracking capability for ALL personnel traveling in remote terrain, whether in aircraft or on foot.

**Using Technology and GIS**

In the last few years, technologies have emerged that makes this quite possible and relatively inexpensive. The search costs of *any one* of the accidents listed above would have paid for such devices for every field NPS employee, to say nothing of the dangers inherent in such searches and, more importantly, the emotional cost to the searchers, friends and family of not finding the person.

There is a class of useful devices called SENDS (Satellite Emergency Notification Devices) which are now in active use in several parks. For instance, Grand Canyon uses the GeoPro Messenger and Nano SHOUT (see below) to keep track of and provide more reliable communication for rangers on patrol in the Canyon, where radio coverage is problematic.

The following are brief reviews of the capabilities of several devices available now. In addition, there is a long range plan for the Shenandoah EICC dispatch center to become the centralized 24/7 clearing house for all SENDS-based emergency activations in the NPS. This was one problem with the SEKI research crew accident – there was no reliable 24/7 emergency callout list when they activated their device, thus no one saw the message right away.

**GeoPro Messenger, SHOUT Nano**

Both are two way, satellite based text messaging, tracking, and emergency transponder with multi-day, rechargeable batteries. The GeoPro has an exchangeable battery, the SHOUT Nano does not. Both use the same web portal for tracking and both are in use in Grand Canyon, Sequoia Kings and several other parks.

**SPOT and DeLorme InReach Satellite Communicator**

Similar devices. Allows one way communication with pre-programmed text and an emergency beacon (send only, no receive capability). Another model allows it to be used with an Android phone for custom outbound text messages.

**BGAN**

A small (5 lb), battery operated device that carries both phone and Internet connection, allows communication anywhere a 30 degree horizon is visible; and allows users to send and receive any form of data (photos, gps tracklogs, maps, weather reports, etc.) from a remote location where neither cell phone or Internet connection is otherwise possible.

**Infinity Mic & ArcGIS Explorer GPS capture**

The Infinity Mic sends and receives a GPS position shown on its built-in screen as well as that of all other similar mics it transmits to. The mic can be ported through ArcGIS Explorer (free map program from Esri) and the locations of all mic users observed real-time and their tracklogs captured for later use. The mic is adaptable to most NPS radios.

A more detailed summary of all of these devices is on the Lodge website in the Members > Reference Library > Reference Documents page: Summary SAR and GIS For Emergency Responders.

**Understanding Technology and GIS**

In addition to technology, though, all supervisors need to review their safety and travel protocols for people going into remote areas. Following the Morgenson and Christensen deaths, parks were directed to make sure there was a radio check-in protocol in place to keep track of all personnel when in the field. Sequoia Kings, for instance, does this twice a day. The ranger is called in the morning for their itinerary, then must check out in the evening when stopped for the day. There are written SOPs for notification when a check-in is missed and for the ranger when their reported route changes.

Because many parks have spotty radio or cell coverage, it's also critical that any team going into the field have a map showing the coverage, what areas are covered by what frequencies, who to contact and on what frequency in the event of an emergency.

This requires the park to map their radio and cell coverage. This has been done, for instance, for radio coverage in Sequoia Kings Park. Backcountry rangers were given maps of their patrol area and throughout the summer season, they drew in polygons showing relative signal strength: none, fair and good for both Transmit & Receive. This was done twice, once years ago with their analog repeater system, then repeated when they switched to digital. A GIS tech then enters all that information into a permanent geospatial database.

In some ways, mapping cell phone coverage is even easier. Most of the major types of phone (e.g. iPhone & Droid) have apps that will continuously ping the cell towers, record the relative signal strength and GPS location, then either send that information in batches to any email or store it on the phone for later retrieval. Rangers and other park personnel can collect this information then have it compiled by a GIS tech to generate a permanent database available on maps to anyone and at anytime.

When anyone goes into the field, especially people who are unfamiliar with an area, they can be given a customized map of the area in a scale that can be easily used (1:24,000 or 7.5 minute). Radio or cell zones are graded in colors (e.g. red for no coverage & green for good signal strength) as well as the locations of cell and radio repeaters so a team has an idea of where they might need to be to send or receive a signal.

This same map can also be used as a team briefing map where the supervisor and team go over the intended route, are briefed on hazards and agree on routes, check-in times, the location of ranger stations and trail crews and other safety information.

**Keeping up with Tech**

Field rangers and supervisors also need to become familiar with technology because visitors are carrying all manner of electronics with them: cell phones, satellite phones, Personal Locator Beacons and GPS units. When they get in trouble, any of these can be a great help in getting a SAR team to them quickly and safely.

Increasingly, though, major mistakes in response are happening because rangers and dispatchers do not...
understand the coordinate values being given them or they do not know how to enter those values into mapping software to determine where the people in trouble are. Two years ago, a Sheriff’s SAR team searched an area 20 miles north of where a hiker signaled for help! When given a string of numbers of a victim’s location, you have to know what those numbers mean and how to use them to plot a location.

There are perhaps five major coordinate systems in common use. Different entities use different systems as their default. In NPS, UTM is often the default but you have to know what zone. If someone is reading coordinates from a paper map, they might be in UTM or Degrees Minutes Seconds, but you also need to know what Datum is being used or the location could be several hundred feet off. Aviation usually uses Degrees Decimal Minutes. In short, you have to know enough to ask questions to clarify given coordinates or you could make a major mistake in responding to a SAR or other incident.

Many parks are routinely getting calls for help from distressed visitors in remote locations using cell phones. A better understanding of the capabilities and limitations of cell phones can greatly help responders. For instance, in December of 2011, a couple in Wales, UK called for help on their cell phone. When the call was transferred to the Brecon Mountain Rescue center (Wales, UK), one of their team determined the type of phone the distressed people were using, then talked them through downloading an app that would give them their coordinates, which the people then read to the SAR team. This has now happened twice in a month. In both cases, the SAR team got to the stranded hikers for a successful outcome.

This required the SAR team knowing the capabilities of different types of phones and where they could be directed to download and install the necessary app. Our workgroup, Google Group: Using GIS in SAR, is making such basic information available. We’ll soon have information like this compiled in a central place (mapsar.net, currently under construction but available soon).

It’s obviously important that to create a safer work environment for employees, the NPS as a whole – and especially Division Chiefs and field supervisors – needs to become familiar with and adopt new technologies and techniques as appropriate. This stuff is out there, it’s relatively inexpensive – certainly far cheaper than the loss of a life or serious injury to an employee – and, though there are limitations, it works. Emerging tech and better protocols have a huge potential to save lives.

I’ve posted a list of resources in the Lodge discussion forum and in the Reference Library > Reference Documents section for anyone wanting further information or training.

**Safety Alert: Near Miss**

During the summer of 2010, a ranger and her son experienced serious nausea, vomiting and an altered mental status while at a remote backcountry station. They were medevaced and it was thought they had the flu or food poisoning. Within days, both returned to their ranger station where the symptoms immediately recurred.

This time carbon monoxide from a propane refrigerator was determined to be the cause though, incredibly, they were not medevaced a 2nd time for evaluation.

There are several critical lessons learned from this incident:

1. A qualified maintenance person needs to do regular and scheduled checks of all open-flame appliances in cabins and quarters. In remote cabins and ranger stations appliances, once installed, are rarely maintained.
2. CO monitors must be installed in any NPS facility where there is open flame. Remote cabins are often ignored when quarters are evaluated for safety code compliance. If a cabin is used for quarters, established health and safety codes must be applied.
3. In any medevac involving an employee, don’t let the employee make medical decisions about their own care. There’s too much potential for an “ah, it’s only a flesh wound” attitude to override proper medical care and established protocols.

With employee injuries especially, always err on the more cautious and conservative approach for care.

A ranger and her son came very close to dying in this accident. We all need to evaluate our buildings where people live and work to make sure they’re safe.

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Gary Pace

Specializing in wooden replicas of NPS Park Ranger Law Enforcement Badges. All items are laser engraved in prime hard maple and professionally finished with each ranger’s individual badge number and title. Badges are approximately 10" h X 8" w and are $75.00 plus $10.00 shipping. These make a great retirement gift or award.

I also offer wooden badges and arrowheads that are about 3" high with rare earth magnets to be used as refrigerator magnets and are $10.00 plus $2.50 shipping. Custom options are available for a variety items. For further information and pricing, email: RangerGAP@aol.com.

Gary has generously donated one of his carved wooden badges to the Lodge. We’re not yet sure how we’ll donate it to the LE ranger community, but will send out a plan in The Email Protection Ranger soon.
Lodge Website

The Lodge website is updated with notices and links to delegates that we think are interesting and useful to resource-based law enforcement officers. Visit it often between issues of the Protection Ranger to keep current on things that affect you and your job. Our address is www.rangepof.com.

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Application for Membership

You may also join, renew and pay your dues online with PayPal: rangepof.com

1. The undersigned, a full-time regularly employed law enforcement officer, do hereby make application for active membership in the U.S. Park Rangers Lodge POP. If my membership should be revoked or discontinued for any cause other than retirement while in good standing, I do hereby agree to return to the Lodge my membership card and other material bearing the POP emblem.