# **UAF Commencement 2011 Rear Adm. David Titley – Keynote address**

President Gamble, Chancellor Rogers, Members of the Board of Regents, fellow Honorary Degree Recipients, distinguished guests, parents, and, most importantly, members of the graduating class of 2011, good afternoon!!

Over 30 years ago, when I was sitting where you are today, I had only one wish from our commencement speaker: that he would be brief – I will try to honor that unspoken but fervent request. Did you know that it is in fact illegal in 49 of the 50 states for someone from the military to give a talk and \*not\* use powerpoint? Fortunately Alaska is the one exception – so you will not have to endure my 98 slide presentation...

Here's the deal: I'll be brief, and you turn your cell phones off. 'Cause the first person whose cell phone rings gets to buy me a drink – and hear even more about climate change!

Before we go any further though, I would like to ask the graduates to stand up, turn, and give their parents a standing ovation (applause) .... Because you never know when the national bank of Dad may be closing!

Take a look at the flag behind me – the flag of the state of Alaska. You all know it, and many of you have seen it for your entire lives. I'd like to focus on the North Star, and what that means for our future, this university and perhaps even some values to consider.

## The climate is changing

One way of assessing climate change is similar to how I navigated at sea, in the days before GPS. You look at all the aids to navigation, and determine your position based on an assessment of all available information, never becoming exclusively dependent on any one source. In the climate case, what you find is massive evidence that when taken together supports the conclusion that the

Earth's climate is changing, and that change is due primarily to human activities.

While there are many uncertainties as to the **timing**, **character**, and **severity** of climate change, the fact that the Earth is changing is not in serious dispute – we have understood the basic science for well over 100 years. And when you talk to people who don't "believe" in climate change, what you often find out is that they do not like what they believe are the policy options. Arguing about the science is in fact a proxy for the very legitimate policy debate.

Stated another way, we are seeing the very **geography** of the Earth change. I don't know what you were taught in high school or middle school, but my teachers never told me geography changes on the timescales of decades – but it does!

Climate change will impact our society as it interacts with other 21<sup>st</sup> century drivers, such as **over-population**,

increased competition for food, energy and water resources, the globalization of markets, and rapid advances in information and other technologies.

Unfortunately the days of being able to solve challenges in terms of single issues are behind us.

### Why the Navy cares

The Department of Defense looks at climate change like it does any other potential changes. We need to assess **how big** of a change it is, **when** it may impact us, and **what** we need to do to prepare for it.

In May 2009 my boss, the Chief of Naval Operations created **Task Force Climate Change** to address the implications of climate change on national security and naval operations

For the Navy, the bottom line is to be **fully capable** and **ready to execute any mission** required of us in the 21<sup>st</sup> century. And of all the issues and challenges regarding climate change the Navy is considering, changes to the

Arctic Ocean are first and foremost. This is the first time in nearly 500 years we will have a new ocean to sail, at least in the summer months. The last person to find a new ocean for the west was a guy named Columbus.

Based on the best science currently available, I think it is likely we could see about four weeks of ice-free conditions by the late 2030s. This will open the region to increased maritime activity like **commercial shipping**, **fishing**, **resource extraction** and **tourism**.

The Navy acknowledges that today, the risk of conflict in the region is low. The member states of the Arctic Council have all agreed to follow the **United Nations Convention** on the Law of the Sea to provide a framework to resolve disputes, and so far we have seen a true spirit of cooperation there. And although the U.S. has not yet acceeded to the Convention, I'm sure we will eventually. Every living Chief of Naval Operations has testified to the Congress supporting ratification, or accession, and just this past week, Secretary of State

Clinton has again affirmed her support for this important treaty.

For the Navy to fully understand the requirements of highlatitude operations, we will need to **better understand the science** behind Arctic climate change, **anticipate the mission requirements** that may be assigned to us, and **assess the capabilities** we will need to have.

### **Partnerships**

The Navy believes that the best approach is to develop partnerships with other government agencies, scientific institutions, and Arctic nations. There are many opportunities for cooperative actions and agreements that will lessen the load on us all.

Partnerships with academia will help us better understand the nature of climate change and the challenges of Arctic operations. Again we can see where the North Star is pointing, and it points to the University of Alaska at Fairbanks. As **America's Arctic University**, UAF and the International Arctic Research Center is a leading center of

Arctic experience and knowledge. We will depend on the insights and knowledge you develop about the high latitudes. I think they are asking the right questions and taking the right approach: to view the arctic as a system, work to reduce where possible and bound the uncertainty in our future forecasts of climate change here in the Arctic, and continue deep, meaningful relationships with the international research community.

We also realize the value of establishing relations with Native Alaskan peoples. Many of you in the audience today are Native Alaskans. Your ancestors learned to adapt to and excel in the Arctic environment. Your wisdom and insights remain invaluable to us: it is knowledge that no supercomputer or satellite system can ever hope to match. Understanding your concerns will help ensure we are respectful of your needs while operating as good stewards of this pristine Arctic environment.

So while climate change will present many **challenges** for vulnerable regions of the globe, it will also present **opportunities** for others, particularly **Alaska**.

Which brings me to my third point:

The North Star points to values that have served previous generations well and will serve you and many more in the years to come.

At work, I've noticed happiness most often comes from a combination of three traits:

- Competence be good at something;
- Autonomy find a job where your boss lets you be good – at that something;
- A sense of purpose you need to think what you're doing is important.

Whether it's better understanding the global and regional Arctic challenges we've talked about, other forms of public service, or being the best mom or dad

you can be, you need to have a sense that what you are doing, or will do, can make a difference.

### And for life in general:

- Be nice -- reciprocity
- Be determined life can be random, and even unfair … persistence is the antidote;
- Be optimistic people will listen to you a lot more

For some of you, looking north will allow you to find those opportunities. Others will no doubt take different paths in life. It's all good. Find that sense of purpose, follow it relentlessly, but be nice to others along the way.

It turns out that many times in life the important thing is not so much in knowing the answers, but rather having the ability to ask the right questions. People many times ask me if I "believe" in Climate Change. I don't think that's the right question. Science is not a belief system – although I am convinced the data show a very high likelihood that the climate is changing, and that human activities contribute

substantially to that change. But I do believe that, at the end of the day, you – and your generation – will find, and implement, practical, sustainable solutions to this challenge. Winston Churchill said that Americans can always be counted upon to do the right thing – after exhausting every other possibility. I absolutely believe you, with the North Star as your guide, will be the ones to do the right thing.

Congratulations, class of 2011. Thank you very much!