[youtube=http://youtu.be/O5h02Yc6lfA]

As this video explains, the Arctic is entering a new state, quite different from the Arctic regime that we have long known. Over a somewhat longer time frame, much the same is happening with the climate and ecology of the world as a whole.

It's a bit like a science fiction cliché: explorers leave home on a journey of interstellar exploration, only to return home to an altered world. The world is now about to experience something similar, though without the interesting space exploration in the middle. Simply by staying where we are and doing nothing to prevent climate change, we are setting in motion a transformation of the world around us. The new world we are creating will have surprises, but from what we can see now, it will be a world of more extremes, where weather conditions that are extraordinary today will become more commonplace.

We are still in the process of writing the instruction manual on how to cope with this new world. But some of the basic instructions are becoming clear:

1. **Stop digging yourself deeper into the hole.** Climate emissions need to peak and decline dramatically.

2. **Be wary and nimble. You're in uncharted territory.** No one knows exactly what new risks will emerge and where. So we need flexible institutions with plenty of surge capacity.

3. **Don't make the mistake of thinking that the world of 2020 will be the same as the world of 2040, or that 2040 will be like 2080.Climate is a moving target.** Or as they said on the plane when we landed here: "Items may have shifted during the duration of this flight." In fact, things will continue shifting. Don't make the mistake of thinking that the world has settled into a new, predictable patterns. It will be decades at best before weather-related risks stabilize.

4. **Help each other and work as a group.** Sounds easy, but getting the world's countries to cooperate has never been easy. Indeed, it's not always easy to get different ministries in the same government to cooperate, or different levels of state and federal government. We'll need to get much better than that.

5. **Don't panic!** Although it's more likely that we will underestimate risks in the

interest of short-term profits and peace of mind, it's also possible that the risks will seem too many and severe to cope with. The situation is bad, but it will only get worse if we give up.

6. The final instruction in the manual: **Don't be stupid.** Many of the worst disaster problems involve obvious mistakes. A year before Katrina, a simulation exercise revealed that many poor people in New Orleans had no way to evacuate. But the government never got around to addressing the problem. That was a dumb mistake and a deadly one. The planet is not going to be forgiving toward our errors.