Teacher - Researcher Networking Strategy

* Pre-deployment
	+ Communication
		- e-mail
		- phone calls
		- skype
	+ Conference calls scheduled
		- Webinar: Monday, 28 January 2013 at 2pm Alaska Standard Time [3pm PST, 4pm MST, 5pm CST, 6pm EST]
		- Pre-Deployment Call: Wednesday, 20 February at 12pm AKST [1pm PST, 2pm MST, 3pm CST, 4pm EST]
		- Conference Google+ Hangout with Mette and Jette – Friday, March 8
	+ Media relations
		- local papers, online news sites, school district publications
		- input from George (NASA) and Sarah (PolarTREC)
	+ Essential scientific knowledge or technical skills
		- IceBridge Instrumentation
			* ATM (airborne topographic mapper)
			* DMS (digital mapping system)
			* Radar instruments (MCoRDS, Snow, Accumulation, Ku)
		- cryosphere (ice.nasa.gov)
	+ What educational tools I can provide
		- blogs
		- social media
		- photographs
		- video
		- pencasts
		- Doceri example problems & illustrations
		- animations
		- translation of technical details to physics curriculum
		- lesson plans & activities
* Deployment
	+ What is needed to be an effective assistant to the scientific efforts
		-
		-
	+ Scientific topics for discussion
		- accumulation radar
		- airborne topographic mapper (ATM)
		- digital mapping system (DMS)
		- KU band radar altimeter
		- magnetometer
		- multichannel coherent radar depth sounder (MCoRDS)
		- position/avionics (POS/AV)
		- airborne gravimeter (AIRGrav)
		- snow radar

* + Set up a plan to continue discussions and collaboration during the deployment
		- flight time (8-10 hours)
		- dinner/evenings
		- days off/inclement weather
	+ Collaboration plan for writing and reviewing lesson plans
		- begin during deployment
		- fact checking
		- ideas
			* magnetic map with vernier mag probe and logger pro s/w
				+ 1D for grade school
				+ 2D for high school
				+ 3D ?
			* 3D plotting - MatLab, Mathematica, Excel, or other
			* laser range finder - data to create maps, contours, or 3D maps
				+ aim in horizontal direction to map depth of field features
				+ aim in vertical direction to map height features (from press box or roof)
			* imagej - use DMS data
			* submarine detection game/activity
			* probe to find different densities (like Tim’s lesson but with layers)
			* compass to probe B-field and map results
			* density
			* phase changes
			* trigonometry (use lasers?)
			* snow depth and sea ice freeboard activity
			* other vernier probeware
		- get input from researchers for ideas
	+ Identify unique and interesting aspects to engage students (grade school and high school) and the public
		- “Greenland minute”
			* short videos
			* tailored for specific age and/or subject
		- ask a scientist
		- interviews
		- history
		- geology
		- physics
		- chemistry
		- biology
		- ecology
		- meteorology
		- sociology
		- geography
* Post-deployment
	+ Skills as an educator I can offer researchers
		- student involvement
		- relating research to the high school physics class
		- educational outreach
		- publicity/PR
	+ Specific items for follow-up
		- student involvement
		- lesson plans
			* incorporate IceBridge data
			* collaborate and review
			* useful to research team
			* lesson ideas
			* visits
			* in person
			* video conference
			* bring researchers into classroom via skype or similar
		- communication - set up a plan