

NOAA, FMI and Roshydromet Tiksi Project Updates  
September 3, 2009

**PROJECTS PLANNED FOR INSTALLATION IN SEPTEMBER – OCTOBER 2009**

- (1) Radiation Sensors for the Baseline Surface Radiation Network Program
- (2) Climate Reference Network Site
- (3) Black Carbon Sampling
- (4) Surface Ozone Sampling
- (5) Surface Heat and Energy Balance Fluxes
- (6) Carbon Dioxide and Methane concentrations
- (7) Carbon Dioxide and Methane Fluxes
- (8) Green House Gas Sampler
- (9) Aerosol sampler\
- (10) Russian Radiation Sensors
- (11) Russian meteorological instrumentation
- (12) Total Ozone Measurements
- (13) Permafrost Measurements

The Total Commercial Value of the equipment in the 8 NOAA and FMI projects is approximately \$335,000 USD

**SHIPPING**

Instruments for Projects 1, 2, 4 and 5 were shipped from Boulder to Yakutsk on August 25<sup>th</sup>. Instruments for Project 6, 7 and 9 are in Helsinki awaiting shipment to St Petersburg. Projects 3,8, 10,11,12,and 13 are in Tiksi.

NOAA has shipped equipment with the Russian shipper [www.patix.ru](http://www.patix.ru) which has a U.S. affiliate [www.veloxshipping.com](http://www.veloxshipping.com). The shipment is in New Jersey as of September 3. NOAA is waiting for an estimate on delivery date in Yakutsk. The original quote was 10 days. Roshydromet-Yakutsk has verified that it will handle shipping from Yakutsk to Tiksi. Flights are available 5 days/week. The planes are small, but most of the NOAA shipment is already separated in small packages. FMI equipment is still in Helsinki. It is expected to ship on September 6 to St Petersburg. It is hoped it will be in Moscow by September 13-17. FMI needs to coordinate with the Polar Foundation if they want PF to continue the shipment to Tiksi.

NOTE: Shipping: Russia to the US. NOAA (Boulder) has received the broken ozone sampler sent to Tiksi last year for repair.

**CUSTOMS**

NOAA Equipment will clear customs in Yakutsk Roshydromet-Yakutsk estimates 10-20 days. FMI Equipment will clear customs in St Petersburg before the equipment leaves Helsinki.

**DATES OF INSTALLATION IN TIKSI**

The AARI team and the NOAA team have agreed upon the final schedule:

NOAA Team will arrive in Moscow (IAD-DME) on September 18 at 10:45 (Flight United 964). NOAA and AARI team will fly Moscow-Yakutsk on September 20 (VKO – YKS) on Siberian Airlines Flight 4475 (Departing 19:40). We think this Siberian Air flight is operated by Yakutia Airlines. NOAA and AARI team will fly Yakutsk-Tiksi on September 21 (YKS – TKS) on Yakutia Air Flight 431 (Departing 13:40), NOAA and AARI team will fly Tiksi -Yakutsk on October 2 (TKS – YKS) on Yakutia Air Flight 272 (Departing 15:00). NOAA and AARI team

will fly Yakutsk-Moscow on October 3 (YKS-VKO) on Siberian Air Flight 4477 (Departing 8:00 a.m.). NOAA and Roshydromet-Moscow and AARI will meet on October 5. NOAA and interested Roshydromet team members to visit U.S. Embassy Moscow on October 6. NOAA Team Departs Moscow on October 7 (DME-IAD) on United Flight 903 at 12:35.

NOTE: For booking flights between Tiksi and Yakutsk, we have had the helpful assistance of Mr. Mikhail Vasiliev from the Yakutia Airlines Marketing Department. ([Vasiliev.Mikhail@yakutia.aero](mailto:Vasiliev.Mikhail@yakutia.aero)). He has made bookings for the NOAA team through email which will be purchased upon arrival in Moscow at VKO.

NOTE: NOAA Visa applications have been submitted after receipt of necessary letters from Roshydromet

NOTE: AARI Computer specialist will come to Tiksi on September 28.

NOTE: FMI and MGO are waiting to buy tickets until it is confirmed that their equipment will arrive. MGO has identified funding to support travel.

NOTE: NOAA team is developing an alternative work plan in the case where equipment does not arrive or is delayed.

NOTE: ALL TRAVELERS MUST SEND NECESSARY INFORMATION TO ROSHYDROMENT IMMEDIATELY TO APPLY FOR PERMISSIONS TO TRAVEL TO TIKSI. THIS INCLUDES RUSSIAN RESIDENTS.

Information is already sent for Uttal, Albee, Vasel, Matrosova.

### **INFRASTRUCTURE SUPPORT**

The science teams need to interact closely with the Polar Foundation on infrastructure requirements for project installation. A priority order for projects and schedule is required.

The CH2MHill and Polar Foundation contract has been sent to Russia for signing. The science teams are filling out the following summary form to request support from Polar Foundation Construction Team. Note that Polar Foundation will also support Russian projects as requested by AARI or MGO. A teleconference call will be scheduled to discuss once all support forms are completed.

PROJECT NAME

INSTITUTION

CONTACT

EXPECTED DATE TO START

EXPECTED DATE TO COMPLETED

LOCATION (CAF, Weather Station, or Surrounding site with GPS coordinates)

PF SUPPORT REQUESTED

GROUND WORK REQUIRED

ELECTRICAL WORK.POWER REQUIRED

IT Support (computer, network connections, remote desk top etc)

CABLING REQUIRED

FURNITURE REQUIRED

MOVEMENT OF EQUIPMENT IN TIKSI REQUIRED

BUILDING PENETRATIONS

OTHER (like towers etc)

FUTURE WORK THAT CAN BE DELAYED TO NEXT YEAR

PRIORITY

## **OPERATIONS**

At time of installation a number of operational issues need to be addressed:

What future infrastructure requirements/improvements are needed?

Project operations plans need to be discussed with Tiksi staff

The documents providing permissions to operate must be matched carefully with actual instruments being installed. [This Permissions Document is now approved.](#)

A preliminary business plan for the Tiksi Observatory needs to be developed

CH2MHill, Polar Foundation and Roshydromet have to resolve issue of building ownership

[Schedule for transferring flask samples from the Tiksi to St. Petersburg and Boulder needs to be developed.](#)

## **ADMINISTRATIVE DOCUMENTS**

The Science Plan agreed upon during the May, 2009 meeting in Boulder, CO has not been signed and accepted.

[U.S is still translating and making comments.](#)

## **PERSONNEL SCHEDULED FOR TRAVEL**

### AARI

Alexander Makshtas

Vasily Kustov

[Alexander Kuzmichov](#)

### MGO

Alexander Reshetnikov

Victor Ivakhov

### NOAA

Taneil Uttal

Ludmila Matrosova

Robert Albee

Brian Vasel

### FMI

Tuomas Laurila

Mika Aurela

Eija Asmi

[Irina Loutsenko](#)