

CONTRACT

among

FAR EASTERN REGIONAL HYDROMETEOROLOGICAL RESEARCH INSTITUTE,

**RESEARCH INSTITUTE FOR HUMANITY AND NATURE
INTER-UNIVERSITY RESEARCH INSTITUTE CORPORATION
NATIONAL INSTITUTES FOR HUMANITIES,**

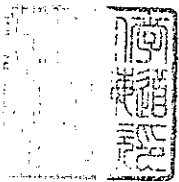
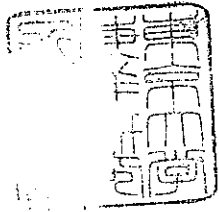
**INSTITUTE OF LOW TEMPERATURE SCIENCE
NATIONAL UNIVERSITY CORPORATION
HOKKAIDO UNIVERSITY**

and

**OCEAN RESEARCH INSTITUTE
NATIONAL UNIVERSITY CORPORATION
UNIVERSITY OF TOKYO**

on

"Research Expedition in the Sea of Okhotsk for 2007"



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Far Eastern Regional Hydrometeorological Research Institute,
Research Institute for Humanity and Nature
Inter-University Research Institute Corporation
National Institutes for Humanities,
Institute of Low Temperature Science
National University Corporation
Hokkaido University
and
Ocean Research Institute
National University Corporation
University of Tokyo

on

"Research Expedition in the Sea of Okhotsk for 2007"

The Research Institute for Humanity and Nature (**RIHN**), The Institute of Low Temperature Science, Hokkaido University (**ILTS**) and Ocean Research Institute, University of Tokyo (**ORI**), hereinafter to be called **CUSTOMER A, B, C**, respectively, in the persons of Prof. Yoneo ISHII, Director, Inter-University Research Institute Corporation, National Institute for Humanities, Prof. Hiroshi SAEKI, President of National University Corporation Hokkaido University, and Prof. Mutsumi NISHIDA, Director of Ocean Research Institute, National University Corporation University of Tokyo on one side, and the Far Eastern Regional Hydrometeorological Research Institute (**FERHRI**), hereinafter to be called **EXECUTOR**, in the person of Dr. Yu. N. VOLKOV, Director of FERHRI, on the other side, concluded the present contract for the following.

1. Research Expedition

The Research Expedition shall be carried out on board the R/V "Professor Khromov" (the *Vessel*). The purpose shall be to quantitatively clarify the physical, chemical and biological processes which occur in the Sea of Okhotsk. The date of the Vessel's departure from Vladivostok shall be 5 August 2007 subject to postponement in accordance with clauses 5.1 or 8.1. The detailed schedule of the cruise is set forth in Annex 1.

2. Subject of the Contract

2.1 The CUSTOMERS A, B, C are to be charged with and the EXECUTOR is to be taken the responsibility for the execution of the research project entitled "Research Expedition in the Sea of Okhotsk for 2007"

2.2 During the term of this Contract, the EXECUTOR shall:

- (a) provide the Vessel in seaworthy condition to conduct the cruise in accordance with the research program specified in Annex 1;
- (b) provide without delay all equipment and materials necessary to facilitate the smooth conduct of the Research Expedition;
- (c) provide the crew, the researchers and the technical staff necessary for the

Research Expedition:

- (d) prepare and make available for use by the participants the equipment and laboratories necessary for conducting observations, data processing, sample treatments and chemical analyses and provide cabins for accommodating the participants during the cruise;
 - (e) apply and obtain the necessary approvals required by Russian authorities for the cruise prior to the Vessel's departure from the port of Vladivostok;
 - (f) prepare and send the documents required for the Vessel's call(s) at port in Japan (such documents shall be received by the CUSTOMER B no later than 5 days before the Vessel's relevant arrival);
 - (g) conduct the operation of all the Vessel's gears, winches and other equipments required to conduct the Research Expedition;
 - (h) carry out standard and special observations under the cruise program specified in Annex 1;
 - (i) ensure the security and personal safety of all participants aboard the Vessel during the cruise; and
 - (j) advise the CUSTOMER from time to time on request of the location of the Vessel and the state of performance of the cruise.
- 2.3 During the term of this Contract, the CUSTOMERS A, B, C shall:
- (a) pay the costs necessary for the execution of the Research Expedition to the EXECUTOR in accordance with clause 4;
 - (b) take all necessary action to enable the CUSTOMER's participants (Japanese participants), set out in Annex 1, to participate in the Research Expedition contemplated during the cruise (including transportation of such persons and transportation, loading and unloading of their research equipments to and from the Vessel);
 - (c) obtain the necessary approval(s) for the Vessel's calls at port(s) in Japan from the authorities concerned; and
 - (d) make necessary instructions to the shipping agency so that the Vessel may received appropriate services at its port of call in Japan.

3. Term of the Contract

The Contract is to be effective after the signing by both sides (the CUSTOMERS A, B, C and the EXECUTOR), and is to terminate at the time of signing of the Completion Report of the Research Expedition by both sides (the CUSTOMERS A, B, C and the EXECUTOR).

4. Fee and Costs

4.1 The CUSTOMERS A, B, C shall pay the EXECUTOR in total a fee (the *Fee*) of US\$7,000 for each day of the cruise, US\$63,000 for repair and preparation of the equipment and US\$4,200 of port charges in Korsakov in accordance with the calculations given in Annex 2. The CUSTOMERS A, B, C agree to pay such Fee for a cruise period of 42 days in addition to the cost for repair and preparation of the equipment and the port charge in Korsakov. Such Fee shall compensate the EXECUTOR for all costs and expenses in relation to the preparation and implementation of the Research Expedition. The CUSTOMERS A, B, C shall in no event be liable to pay the EXECUTOR any additional fees or expenses in connection with the Research Expedition.

4.2 The CUSTOMERS A, B and C agree to pay US\$137,600, US\$189,200 and US\$34,400, respectively in accordance with the calculations for the proportion (8:11:2) of their own research times during the cruise given in Annex 1 (Table 2). The payment of the Fee shall be made in twice. The first payments of US\$110,080, US\$151,360 and US\$27,520 by CUSTOMERS A, B and C, respectively (80% of total amounts) and the second payments of US\$27,520, US\$37,840 and US\$6,880 by CUSTOMERS A, B and C,

respectively (20% of total amounts) shall be made at the dates provided in clause 4.3. However, if the actual number of days of the cruise decreases, the CUSTOMERS A, B, C shall reduce the amount of the second payment as the result of such decrease.

4.3 The first payments of the Fee shall be due within 30 days of the dates the CUSTOMERS A, B, C receive invoices from the EXECUTOR just after the conclusion of this Contract. The second payments of the Fee shall be due within 30 days of the date the CUSTOMERS A, B, C receive invoices and the Completion Report after the cruise.

4.4 The Fee shall be paid to the account standing in the name of FAR EASTERN REGIONAL HYDROMETEOROLOGICAL RESEARCH INSTITUTE, 24, Fontannaya st. Vladivostok, Russia, with the Saving Bank of the Russian Federation (Dalnevostochny office), br. 8635/0174 (SWIFT: SABRRU8KVLN), presently located at 12, Aleutskaya st. Vladivostok, Russia (Account № 40503840150260203028), through the corresponding bank, the Bank of New York, USA (SWIFT: IRVTUS3N) (Account № USD 890-0057-610).

4.5 The CUSTOMERS shall bear any port charges imposed at a Japanese port of call during the cruise and shall pay such charges through a shipping agency in Japan.

4.6 The EXECUTOR shall bear all costs and expenses incurred in respect of (a) the repair of the Vessel, (b) the installation and testing of additional equipment and special devices for the Vessel and (c) the port charges imposed at the ports of Vladivostok and Korsakov.

4.7 The CUSTOMERS and EXECUTOR shall bear for their own account any insurance to be taken out for the duration of the cruise with respect to their own researchers participating in the cruise.

5. Liabilities

5.1 In the event the CUSTOMERS A, B and/or C fail to make payment when due of the Fee, the EXECUTOR may postpone the date of Vessel's departure until such payment is made.

5.2 In the event the CUSTOMERS A, B, C or EXECUTOR fail to perform their obligation referred in clauses 2.2(e) or 2.3 (c/d) of this Contract, the demurrage imposed in respect of the Vessel (regardless of whether the Vessel is at sea or in port) shall be borne by the defaulting side.

5.3 The CUSTOMERS A, B or C shall not be liable for any losses or damages occurring to the Vessel and/or the equipment belonging to the EXECUTOR or for any loss, cost, injury or damages to any third party during the cruise.

5.4 The EXECUTOR shall not be liable for any losses or damages occurring to the equipment belonging to the CUSTOMERS A, B or C during the cruise.

6. Ownership of Observation Data

Primary data and secondary processed data obtained during the Research Expedition shall be jointly owned by the CUSTOMERS and EXECUTOR.

7. Completion Report of the Research Expedition

The EXECUTOR shall submit a Completion Report of the Research Expedition to the CUSTOMERS A, B and C within 30 days after completion of the cruise.

8. Special Conditions

8.1 If the weather conditions become bad, the duration of the cruise, schedule, route or number of days at anchor may be changed by mutual agreement. If, in such event, the cruise period is increased, the expenses and charges relating thereto shall be borne by the CUSTOMERS.

8.2 The CUSTOMERS and EXECUTOR shall endeavor to make an emergency call at a port of any country or territorial water in case of a storm or upon the occurrence of illness to the crew or participants.

8.3 All expenses relating to emergency care of the crew or participants shall be borne by the CUSTOMERS A, B, C or EXECUTOR in relation to which the relevant person is affiliated.

9. Force Majeure

9.1 Notwithstanding any provision in this Contract, neither the EXECUTOR nor CUSTOMERS shall be liable to each other for any loss, damages or delay or failure in performing its obligation hereunder if such loss, damages or delay or failure to perform arises out of or from any force majeure event, including but not limited to, acts of God, fire, natural disasters, epidemics, war (regardless of whether declared or undeclared), warlike actions, insurrection, revolution or civil strife, piracy and any other cause, beyond the reasonable control of either the EXECUTOR or CUSTOMER, which makes the continuance of operations impossible.

9.2 In the event either EXECUTOR or CUSTOMERS A, B, C become unable to perform its obligations under this Contract as a result of a force majeure, the defaulting party shall advise the other party of such force majeure within 24 hours of the occurrence of such force majeure and promptly notify of its cessation.

9.3 In the event either EXECUTOR or CUSTOMERS A, B, C is unable to resume the performance of its obligations hereunder, this Contract may be terminated by mutual agreement.

10. Termination

Notwithstanding any other provision in this Contract, if the EXECUTOR breaches any material provision of this Contract and if such breach is not cured within 30 days of notice from the CUSTOMERS A, B or C to cure such breach, the CUSTOMERS may terminate this Contract. Upon such termination, the EXECUTOR shall return all personnel of the CUSTOMERS to the closest friendly port (if at sea) and shall repay to the CUSTOMERS any portion of the Fee in respect of days reduced in relation to the cruise.

11. Language

This Contract has been prepared in English. Any translation hereof is for convenience purposes only and shall not have any effect on the interpretation or construction hereof.

12. Notices

Any notice required or permitted to be given hereunder shall be in writing and shall be (a) personally delivered or (b) transmitted by postage prepaid registered mail or by courier service or (c) transmitted by facsimile (with postage prepaid mail confirmation) to the address of the CUSTOMERS A, B, C and EXECUTOR listed below. All notice shall be effective on receipt. Any party hereto may change its address for the purposes hereof by notice to the other party.

13. Consultation

Matters not stipulated in this Contract or any doubt with respect to interpretation or performance of this Contract shall be discussed in good faith by the CUSTOMERS and EXECUTOR.

14. Legal Address

CUSTOMER A (Assoc. Prof. Takayuki SHIRAIWA)

Research Institute for Humanity and Nature (RIHN), Inter-University Research Institute Corporation, National Institutes for the Humanities, 457-4 Motoyama, Kamigamo, Kita-Ku, Kyoto 603-8047, JAPAN

Phone: +81-75-707-2320, Fax: +81-75-707-2507

CUSTOMER B (Assoc. Prof. Takeshi NAKATSUKA)
Institute of Low Temperature Science (ILTS), National University Corporation
Hokkaido University, N19 W8, Kita-Ku, Sapporo 060-0819, JAPAN
Phone: +81-11-706-5504, Fax: +81-11-706-7142

CUSTOMER C (Prof. Ichiro YASUDA)
Ocean Research Institute (ORI), National University Corporation University of
Tokyo, 1-15-1 Minamidai, Nakano-Ku, Tokyo 164-8639, JAPAN
Phone: +81-3-5351-6511, Fax: +81-3-5351-6506

EXECUTOR (Dr. Yu. N. Volkov)
Far Eastern Regional Hydrometeorological Research Institute (FERHR)
24 Fontannaya ST., Vladivostok 690091, RUSSIA
Phone: +7-4232-43-40-88; Fax: +7-4232-43-40-54 or +7-4232-40-49-83

15. Signs of all the parties

From the CUSTOMER A

Prof. Yoneo ISHIDA
Director,
Inter-University Research

Institute Corporation, National
Institute for Humanities
(Tokyo, Japan)

"15" June 2007

From the CUSTOMER C

Prof. Mutsumi NISHIDA
Director,
Ocean Research Institute,
National University Corporation

University of Tokyo
(Tokyo, Japan)

"25" June 2007

From the CUSTOMER B

Prof. Hiroshi SAEKI
President,

National University Corporation
Hokkaido University
(Sapporo, Japan)

"21" June 2007

From the EXECUTOR

Dr. Yu. N. VOLKOV

Director,
Far Eastern Regional
Hydrometeorological Research
Institute
(Vladivostok, Russia)

"06" June 2007



IN WITNESS WHEREOF, the CUSTOMERS A, B, C and EXECUTOR have signed this Contract in quadruplicate, one copy each shall be held by each party.

Annex 1

PROGRAM of "Research Expedition in the Sea of Okhotsk for 2007" on R/V "Professor Khromov"

1. Observational Schedules

The Research Expedition on R/V "Professor Khromov" is scheduled as follows:

- (1) Leaving Vladivostok on 5 August.
- (2) Arriving at Otaru on 7 August.
- (3) Leaving Otaru 9 August.
- (4) Observations in the Sea of Okhotsk via Korsakov during the period from 9 August to 12 September (Time schedule of the observations are shown in Table 1).
- (5) Arriving at Otaru on 12 September.
- (6) Leaving Otaru on 13 September.
- (7) Arriving at Vladivostok on 15 September.

Table 1: Detailed schedule of Research Expedition in the Sea of Okhotsk for 2007 on R/V "Professor Khoromov"

5 Aug (Sun)	Departure from Vladivostok
6 Aug (Mon)	
7 Aug (Tue)	Arrival at Otaru (10:00 am: Local Time) and Preparation & Customs for the cruise (to 9 Aug)
8 Aug (Wed)	
9 Aug (Thu)	Departure from Otaru (10:00 am: Local Time)
10 Aug (Fri)	Arrival at Korsakov
11 Aug (Sat)	Departure from Korsakov
12 Aug (Sun)	Observation at UW2
13 Aug (Mon)	Observations at UE1, 2, 3
14 Aug (Tue)	Observations at BE2, BF2, BF1, BW1, BW2
15 Aug (Wed)	Observation at BE1, BD2, BD1, BC2
16 Aug (Thu)	Observation at BC1, BB3, BB2, BB1, BA2
17 Aug (Fri)	Observation at BA1
18 Aug (Sat)	Observation at BM6, BM5, BM4, KS2, KS3
19 Aug (Sun)	Observation at KC4, KC3

20 Aug (Mon)	Observation at KC2, KC1
21 Aug (Tue)	Shift to A-line
22 Aug (Wed)	
23 Aug (Thu)	Observation from A1 to A6 (to 25 Aug)
24 Aug (Fri)	
25 Aug (Sat)	
26 Aug (Sun)	Observation from B1 to B7 (to 27 Aug)
27 Aug (Mon)	
28 Aug (Tue)	Observation from C1 to C9 (to 29 Aug)
29 Aug (Wed)	
30 Aug (Thu)	Observation from E1 to E9 (to 1 Sep)
31 Aug (Fri)	
1 Sep (Sat)	
2 Sep (Sun)	Observation at F1 and F7
3 Sep (Mon)	Observation from G1 to G16 (to 4 Sep)
4 Sep (Tue)	
5 Sep (Wed)	Observation from D7 to D1 (to 7 Sep)
6 Sep (Thu)	
7 Sep (Fri)	
8 Sep (Sat)	Departure from D1
9 Sep (Sun)	
10 Sep (Mon)	Arrival at Korsakov
11 Sep (Tue)	Departure from Korsakov
12 Sep (Wed)	Arrival at Otaru (10:00 am: Local Time)
13 Sep (Thu)	Departure from Otaru
14 Sep (Fri)	
15 Sep (Sat)	Arrival at Vladivostok

*Schedule and order of the observations may be changed by mutual agreement, according to weather condition and/or degree of accomplishment in the observations.

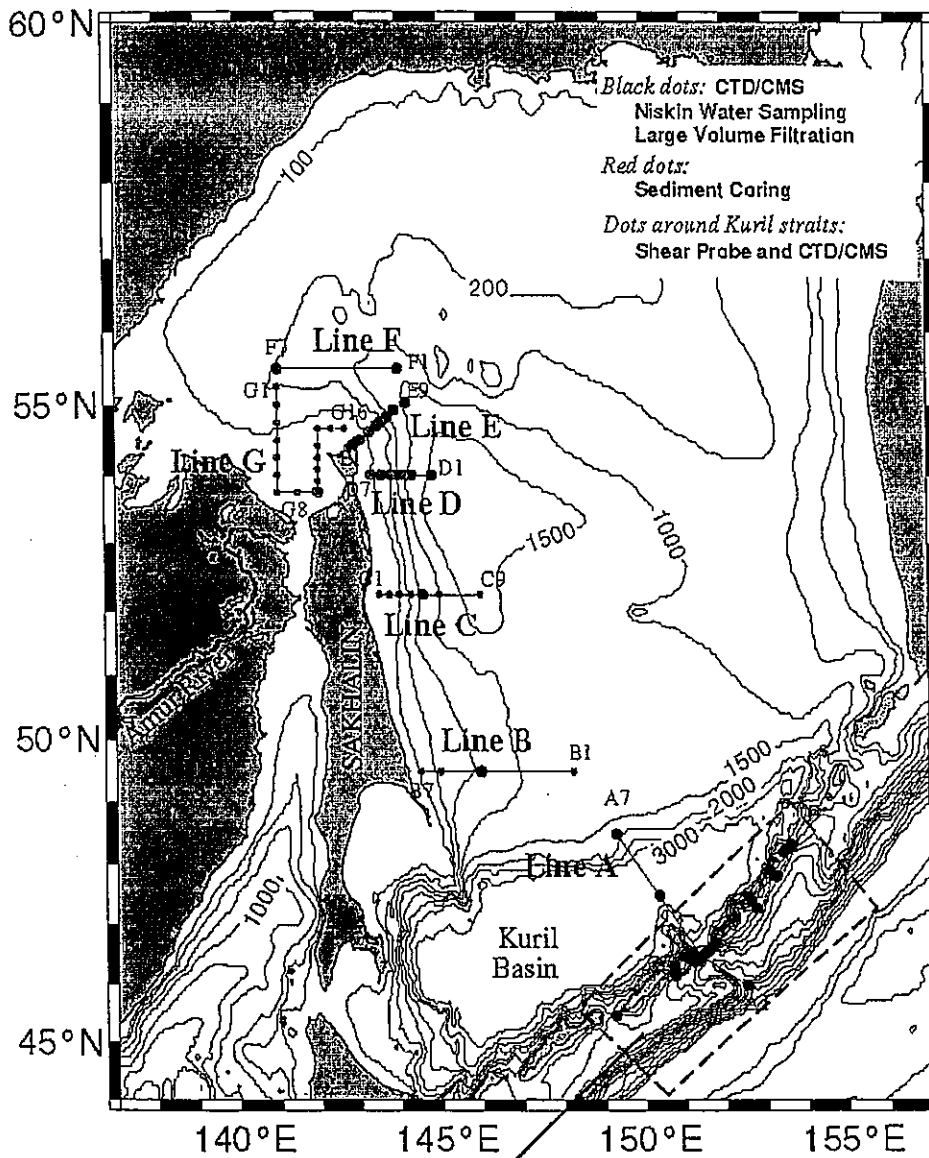
*Observational stations are shown in Figure 1 and 2, and listed in Table 2.

2. Observational Stations, Items and Times

Figure 1 and 2 show observational area and stations. Detailed location, observational items and times at each station are listed in Table 2.

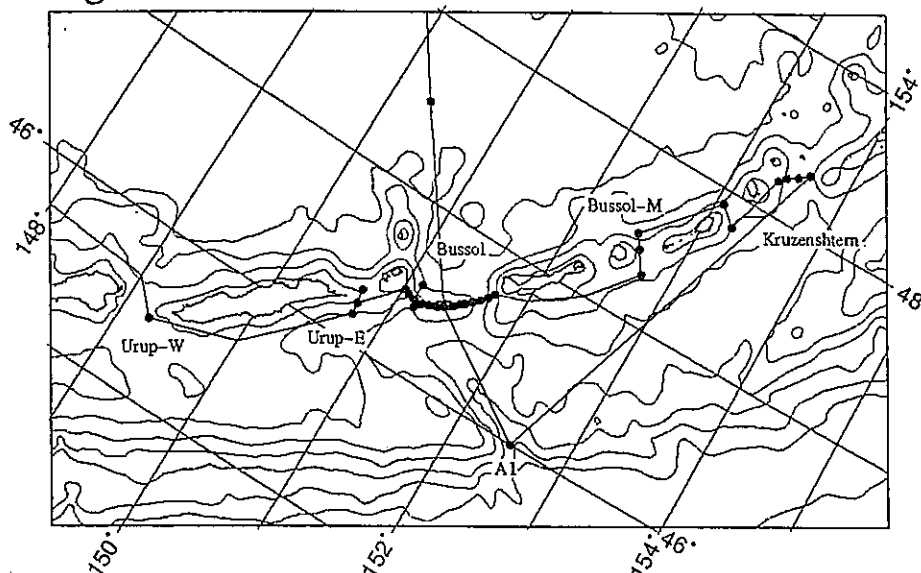
Figure 1

2007 cruise – Planned site map



Please look at a separate sheet
for more detailed information
around Kuril straits

Figure 2



Along the cruise route, following continuous observations will be carried out too.

"Aerosol sampling": Aerosol sampling by high volume air sampler with wind direction & wind speed monitoring unit.

"Surface water sampling (1)": Continuous water sampling from shipboard using plastic tube and pump for bio-optical and chemical measurements

"Surface water sampling (2)": Surface water sampling for iron analysis by towed-fish clean sampling system.

Table 2: Observational Stations, Items and Times (hours)

Station	Latitude	Longitude	Observational Items				
			CTD	X	W	LVF	S
UW2	45 28.60 N	149 15.00 E	1.3	<u>1.2</u>			
UE1	46 10.00 N	150 43.80 E	3.3	<u>4.5</u>			
UE2	46 14.20 N	150 43.00 E	3.2	<u>4.0</u>			
UE3	46 19.56 N	150 41.76 E	1.3	<u>1.5</u>			
BE2	46 28.00 N	151 01.00 E	0.6	<u>0.8</u>			
BF2	46 27.30 N	151 03.60 E	0.9	<u>1.2</u>			
BF1	46 26.60 N	151 07.40 E	6.6	<u>9.2</u>			

BW2	46 32.64 N	151 07.80 E	1.4	<u>1.9</u>			
BW1	46 24.00 N	151 09.66 E	1.1	<u>1.5</u>			
BE1	46 26.40 N	151 12.00 E	0.6	<u>0.8</u>			
BD2	46 27.50 N	151 15.60 E	0.9	<u>1.2</u>			
BD1	46 28.60 N	151 20.00 E	0.6	<u>0.7</u>			
BC2	46 32.00 N	151 27.00 E	0.6	<i>0.7</i>			
BC1	46 34.00 N	151 30.00 E	2.4	<i>3.4</i>			
BB3	46 35.00 N	151 32.00 E	8.8	<i>11.5</i>			
BB2	46 37.00 N	151 35.00 E	1.5	<i>1.9</i>			
BB1	46 39.00 N	151 38.00 E	1.4	<i>1.9</i>			
BA2	46 41.30 N	151 41.10 E	1.2	<i>1.7</i>			
BA1	46 43.60 N	151 43.20 E	4.3	<i>17.3</i>			
BM6	47 17.30 N	152 44.80 E	0.8	<i>1.1</i>			
BM5	47 24.90 N	152 37.26 E	0.5	<i>0.7</i>			
BM4	47 29.90 N	152 32.20 E	0.8	<i>1.1</i>			
KS2	47 54.70 N	153 04.00 E	0.5	<i>0.7</i>			
KS3	47 48.90 N	153 14.16 E	1.1	<i>1.5</i>			
KC4	48 12.00 N	153 24.00 E	3.2	<i>4.0</i>			
KC3	48 14.40 N	153 27.00 E	5.5	<i>7.5</i>			
KC2	48 16.70 N	153 32.70 E	8.2	<i>3.8</i>			
KC1	48 19.60 N	153 37.80 E	3.2	<i>4.0</i>			
A1	46 00.00 N	152 30.00 E	3.4		<i>2.0</i>	<i>4.0</i>	
A2	46 30.00 N	151 23.18 E	9.4			<i>8.0</i>	
A4	47 30.00 N	150 20.45 E	3.4			<i>4.0</i>	
A6	48 30.00 N	149 17.73 E	3.4			<i>4.0</i>	
B1	49 30.00 N	148 15.00 E					<i>3.0</i>
B4	49 30.00 N	146 00.00 E	6.1			<i>8.0</i>	<i>3.0</i>
B6	49 30.00 N	145 00.00 E					<i>3.0</i>
B7	49 30.00 N	144 31.10 E					<i>0.5</i>
C1	52 15.00 N	143 30.00 E					<i>0.5</i>
C2	52 15.00 N	143 45.00 E					<i>0.5</i>
C3	52 15.00 N	144 00.00 E					<i>0.5</i>
C4	52 15.00 N	144 18.00 E					<i>0.5</i>
C5	52 15.00 N	144 35.00 E	3.7			<i>4.0</i>	
C6	52 15.00 N	145 00.00 E					<i>3.0</i>

C9	52 15.00 N	146 00.00 E					3.0
E1	54 26.12 N	142 53.00 E	0.5				0.5
E2	54 29.37 N	143 00.00 E	0.5				0.5
E3	54 30.31 N	143 03.40 E	0.5				0.5
E4	54 37.24 N	143 17.00 E	0.6				0.5
E5	54 42.25 N	143 28.16 E	0.6				0.5
E6	54 45.56 N	143 35.00 E	0.7				0.5
E7	54 49.70 N	143 44.00 E	0.8				
E8	54 55.40 N	143 53.98 E	0.9			3.0	
E9	55 02.10 N	144 11.00 E	1.2				
F1	55 30.00 N	144 00.00 E	4.1			6.0	
F7	55 30.00 N	141 00.00 E	0.7			3.0	3.0
G1	55 15.00 N	141 00.00 E					0.5
G2	55 00.00 N	141 00.00 E					3.0
G3	54 45.00 N	141 00.00 E					0.5
G4	54 30.00 N	141 00.00 E					0.5
G5	54 15.00 N	141 00.00 E					0.5
G6	54 00.00 N	141 00.00 E					0.5
G7	53 45.00 N	141 00.00 E					0.5
G8	53 45.00 N	141 30.00 E					0.5
G9	53 45.00 N	142 00.00 E	0.5			6.0	0.5
G10	53 55.00 N	142 00.00 E					0.5
G11	54 05.00 N	142 00.00 E					0.5
G12	54 15.00 N	142 00.00 E					0.5
G13	54 25.00 N	142 00.00 E					0.5
G14	54 40.00 N	142 00.00 E					0.5
G15	54 40.00 N	142 20.00 E					0.5
G16	54 40.00 N	142 40.00 E					0.5
D7	54 00.00 N	143 20.00 E	0.5				0.5
D6	54 00.00 N	143 35.00 E	0.5				0.5
D5	54 00.00 N	143 50.00 E	0.6				0.5
D4	54 00.00 N	144 00.00 E	1.7			8.0	
D3	54 00.00 N	144 10.00 E	2.2				3.0
D2	54 00.00 N	144 20.00 E	2.3				
D1	54 00.00 N	144 50.00 E	2.7				3.0

*Capital letters above the columns of "Observational Items" in Table 2 indicate following items.

"CTD": CTD/CMS observation or XCTD observation

"X": Turbulence monitoring using shear probe or XCP observation

"W": Water sampling from surface and subsurface layers by Niskin bottles without CTD/CMS system

"LVF": Large volume water filtration using an in-situ filtration unit of suspended particles.

"S": Sediment coring

Numbers in the columns of the "Observational Items" in Table 2 indicate the times (hours) necessary to finish the observational items at each station. Among all the observational times (hours), "Bold", "Italic" and "Underlined" characters correspond to the observations mainly carried out for the CUSTOMERS A, B and C, respectively. The total observational times for CUSTOMERS A, B and C are 117, 164 and 29 hours, respectively. Their proportions are 8 : 11 : 2.

3. Participants

Following 20 people will participate in the cruise from the CUSTOMER side. Alphabet A, B or C described at the end of name indicates the CUSTOMER for which the participant mainly works.

- (01) Dr. Takeshi NAKATSUKA (Principal Investigator; Associate Professor, Chemical Oceanography, Hokkaido University) B
- (02) Dr. Jun NISHIOKA (Associate Professor, Chemical Oceanography, Hokkaido University) A
- (03) Dr. Yutaka WATANABE (Associate Professor, Chemical Oceanography, Hokkaido University) A
- (04) Mr. Kazuya ONO (Technical Staff, Physical Oceanography, Hokkaido University) B
- (05) Mr. Kazuyuki FUJITA (Technical Staff, Physical Oceanography, Hokkaido University) B
- (06) Mr. Daisuke NAGAOKA (Graduate Student, Chemical Oceanography, Hokkaido University) A
- (07) Mr. Koji SUGIE (Graduate Student, Chemical Oceanography, Hokkaido University) A
- (08) Ms. Eri MANABE (Graduate Student, Chemical Oceanography, Hokkaido University) A
- (09) Mr. Shuta MORISHIMA (Graduate Student, Physical Oceanography, Hokkaido University) B
- (10) Mr. Yohei FUKUDA (Graduate Student, Chemical Oceanography, Hokkaido University) B
- (11) Mr. Yu MIKAMI (Graduate Student, Chemical Oceanography, Hokkaido University) B

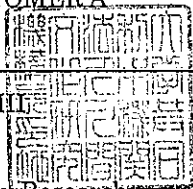
University) B

- (12) Mr. Keigo TADA (Graduate Student, Paleoceanography, Hokkaido University) B
- (13) Dr. Ichiro YASUDA (Professor, Physical Oceanography, University of Tokyo) C
- (14) Dr. Sachihiko ITOH (Assistant Professor, Physical Oceanography, University of Tokyo) C
- (15) Mr. Hideo NAGAE (Technical Staff, Physical Oceanography, University of Tokyo) C
- (16) Mr. Satoshi OSAFUNE (Graduate Student, Physical Oceanography, University of Tokyo) C
- (17) Mr. Masahiro YAGI (Graduate Student, Physical Oceanography, University of Tokyo) C
- (18) Mr. Hitoshi KANEKO (Graduate Student, Physical Oceanography, University of Tokyo) C
- (19) Dr. Naomi KOBAYASHI (Senior Research Scientist, Paleoceanography, Japan Agency for Marine-Earth Science and Technology) B
- (20) Dr. Akira IJIRI (Postdoctoral Researcher, Paleoceanography, Japan Agency for Marine-Earth Science and Technology) B

Signs of all the parties (Annex 1)

From the CUSTOMER A

Prof. Yoneo ISHII
Director,
Inter-University Research
Institute Corporation, National
Institute for Humanities
(Tokyo, Japan)



"15" June 2007

From the CUSTOMER C

Prof. Mutsumi NISHIDA
Director,
Ocean Research Institute,
National University Corporation
University of Tokyo
(Tokyo, Japan)



"21" June 2007

From the CUSTOMER B

Prof. Hiroshi SAEKI
President,
National University Corporation
Hokkaido University
(Sapporo, Japan)



"21" June 2007

From the EXECUTOR

Dr. Yu. N. VOLKOV
Director,
Far Eastern Regional
Hydrometeorological Research
Institute
(Vladivostok, Russia)



"06" June 2007

Annex 2

ESTIMATE of charges for Research Expedition in the Sea of Okhotsk for 2007 on R/V "Professor Khromov"

Duration of cruise	42 days
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Crew	29 persons
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Expedition staff including Japanese participants	30 persons
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1. Fuel (7,000 liters per day)	4,900 \$/day
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2. Oil (95 liters per day)	190 \$/day
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3. Fresh water (10,000 liters per day)	70 \$/day
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4. Technical supply	1,190 \$/day
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5. Food	650 \$/day
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Sub-Total	7,000 \$/day (294,000\$ / 42 days)
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6. Repair and preparation of equipments	63,000 \$
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7. Port charges in Korsakov	4,200 \$
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Total	361,200 \$
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Signs of all the parties (Annex 2)

From the CUSTOMER A

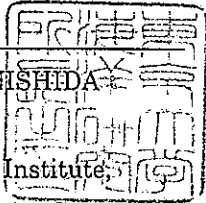
Prof. Yoneo ISHII
Director,
Inter-University Research
Institute Corporation, National
Institute for Humanities
(Tokyo, Japan)



"15" June 2007

From the CUSTOMER C

Prof. Mutsumi NISHIDA
Director,
Ocean Research Institute,
National University Corporation
University of Tokyo
(Tokyo, Japan)



"25" June 2007

From the CUSTOMER B

Prof. Hiroshi SAEKI
President,
National University Corporation
Hokkaido University
(Sapporo, Japan)



"21" June 2007

From the EXECUTOR

Dr. Yu. N. VOLKOV
Director,
Far Eastern Regional
Hydrometeorological Research
Institute
(Vladivostok, Russia)



"06" June 2007