

# ***CSK NEWSLETTER***

## *Cooperative Study of the Kuroshio and Adjacent Regions*

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Nº 2

September 1965

JAPANESE OCEANOGRAPHIC DATA CENTER

Hydrographic Division, Maritime Safety Agency  
5-1 Tsukiji, Chuo-ku, Tokyo, Japan

I. SPECIAL FACILITIES FOR RESEARCH VESSELS PARTICIPATING IN THE CSK AND OTHER LOGISTICS PROBLEMS. (Ref. 14 Manila Report)

Circular letter from Dr. Fedorov, Secretary of the Office of Oceanography, UNESCO. 18 March 1965 (AVS. 9/21D, CL. 85).

Subject; Cooperative Study of the Kuroshio and Adjacent Regions.

Sir;

I have the honour to refer to Resolution III-5 of the Inter-governmental Oceanographic Commission, which adopted the Cooperative Study of the Kuro-shio as its official programme and to commended to its Member States active participation.

The International Coordinating Group, which met in Manila from 8 to 11 February 1965, agreed that the commencing date of ship operation for C.S.K. should be 1st July 1965.

In addition to their participations in the Cooperative Study, Member States can assist its work greatly by recognising the international character of the operation and by furnishing to the participating vessels the assistance and facilities commonly accorded to visiting government vessels. These include the following:

- (a) Exemption from canal and harbour fees for the research ships taking parts; port, docking facilities and pilotage at no cost or at the cheapest possible rates;
- (b) Tax-exempt fuel for ships engaged in the Expedition;
- (c) Special customs facilities for the entry and embarkation of scientific equipment and stores needed for the Expedition. (It is important that the packaging of delicate scientific equipment is not disturbed and that water samples are not opened);
- (d) Special customs facilities for trans-shipment from ship to home or other laboratories of scientific specimens collected by the Expedition;
- (e) Simplification of procedure for obtaining permission for ships to make scientific observations in coastal waters and to enter minor ports when necessary;

As soon as available, the operations schedule will be sent to you concerning research vessels planning to visit your ports. I would appreciate receiving the name of the Agency in your country to which these schedule be sent. It would also be extremely helpful to be informed as to the policy of your Government with respect

to the specific facilities listed above.

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LETTERS FROM EACH COUNTRY TO DR. FEDOROV

CHINA: 8 June 1965. From Yin-Shin Liu, Secretary-General, Chinese National Commission for UNESCO.

Sir;

Referring to your letter AVS. 9/21D, CL.85 on the above subject, I have the honour to inform you that recognizing the international character of this study project, our Government is willing to furnish to the participating vessels of friendly powers the assistance and facilities commonly accorded to visiting government vessels.

To be specific, I shall briefly enumerate our governmental policies with respect to the facilities listed in your letter as follows:

- (a) Harbour fees will be exempted. Port facilities will be freely provided. But docking facilities (under private management) and pilotage (unionized) must be paid.
- (b) Fuel-tax will be exempted.
- (c) and (d) Special customs facilities will be granted.
- (e) Foreign ships making scientific observations on the open sea near our coast should be advised to keep away from our territorial waters. Permission for entering our three ports, Keelung, Kaohsing and Hwalien when necessary will be simplified to the minimum procedure.

Operation schedule should be sent to our Ministry of Education, 11 South Chung-Shan Road, Taipei, Taiwan, Republic of China.

JAPAN: 18 June 1965. From Masami Ota, Permanent Delegate of Japan to UNESCO.

Sir;

With reference to your letter, AVS. 9/21D, CL.85 of 18 March 1965, concerning the assistance and facilities to be accorded to visiting government vessels participating in the cooperative study

of the Kuro-shio and adjacent region,

I have the honour to enclose herewith, under the instructions from my government, informations and the policy of the Government of Japan with respect to the facilities listed in your letter.

The Japanese Government has decided to grant the same facilities to the visiting vessels participating in the Cooperative Study of the Kuroshio and Adjacent Regions, as it has granted to the International Indian Ocean Expedition. In order to be able to meet satisfactorily the convenience of the vessels, it is requested that the previous notice of the operations schedule of each vessel (including name, tonnage of the ship and the number of crew and persons on board) planning to visit Japanese ports should be sent to the following address, as early as possible;

Dr. Kiyoo Wadati, National Coordinator for CSK,  
c/o Japanese National Commission  
for UNESCO.  
4-3, Kasumigaseki, Chiyoda-Ku,  
Tokyo, JAPAN.  
(Cable Address: UNESCOCOM TOKYO)

The facilities which will be granted to the vessels concerned (with the understanding that they will never engage in any trade) with respect to the five items shown in the letter AVS. 9/21D are as follows:

(a) Exoneration of Tonnage Tax, Special Tax on Tonnage and fee for permission to enter or leave the ports not open to foreign commerce and navigation.

Reduction or exemption of fee of port and docking facilities can not be committed, for these facilities are not operated by the Government in Japan.

No exoneration of pilotage charges.

(b) Exoneration of tax for ship's stores (including fuel), so far as the customs authorities finds it appropriate to do so, by taking into due consideration the type, tonnage and number of the crew etc. of the vessels.

(c) Customs inspection of export and import goods will be facilitated as far as possible, account being taken of the purpose and character of the CSK.

Portable scientific apparatus destined for professional use of the crew are exempted from customs duties, and scientific equipments which are not regarded as such portable apparatus, if they are in bonded area or they travel across Japan as bonded goods, are exempted as well.

(d) In case of trans-shipment of scientific specimens

collected by the CSK, their customs inspection too will be facilitated as far as possible, as stated in (c) above.

When scientific specimens are examined by Japanese institutions or kept temporarily in Japanese establishments, or re-exported within one year, or sent aboard by a ship or an aircraft other than the original vessel, they are exempted from custom duties, provided that the necessary formalities are fulfilled.

(e) Permissions must be obtained to make scientific researches within the Japanese territorial waters. In case of the researches in the coastal waters of Japan, a notice concerning the details of the operations there is requested in advance, in order to avoid any kind of difficulties.

When it is necessary for the vessel to enter minor ports, utmost consideration will be given to simplify every procedure, provided that an advance notice is given.

PHILIPPINES: 7 April 1965.

From Constancio M. Legaspi,  
National Coordinator for CSK,  
Vice-Chairman, NCMS.

Sir;

This is to acknowledge receipt of your Circular Letter dated 18 March 1965, regarding Resolution III-5 of the Intergovernmental Oceanographic Commission which adopted the Cooperative Study of the Kuroshio and Adjacent Regions.

In this connection, I am pleased to inform you that I have this date referred your letter to the Commissioner of Customs regarding items (a), (b), (c) and (d). I will inform you of the policies regarding these customs matters as soon as a reply is received from them. With regards to item (e), the usual procedure regarding this matter is to forward the request, together with the plans and operational procedures, to our Department of Foreign Affairs. This said office will grant the necessary permit and will set the conditions required for the scientific observations in our coastal waters.

THAILAND: 29 July 1965.

From Chaloeem Yuviengjaya,  
Acting Secretary-General,  
Thailand National Commission  
for UNESCO.

Sir;

With reference to your letter No.AVS. 9/21D CL.85 of 18 March 1965 concerning Cooperative Study of the Kuroshio and Adjacent Regions, I am entrusted to inform you that the matter has been referred to the National Committee on Marine Science to the effect that the Government of Thailand has decided in favour of according facilities and assistance as requested. And the Ministries of Defence, of Foreign Affairs, of Finance and of Communication have already been informed of the decision concerned.

U. K. (Hong Kong): 30 June 1965.

From A.P. Richardson  
for Director of Agri-  
culture and Fisheries.

Dear Sir;

I regret the delay in replying to your letter of 18 March 1965, but have pleasure in informing you that the Hong Kong Government will do everything possible to assist visiting research vessels engaged on the Cooperative Study of the Kuroshio and Adjacent Regions.

In particular, answers under the five points listed on the second page of your letter are that;

(a) Although it is regretted that fisheries research vessels cannot be exempted from anchorage, light and buoy dues controlled by Table 4 of the Merchant Shipping Ordinance 1953, these are very low. They would amount to:

(i) light dues at the rate of HK 5 cents per registered ton.

(ii) no anchorage fees being charged for the first 30 days, but thereafter a fee of HK 80 cents per registered ton per day would be charged for lying in the harbour or HK 20 cents per 100 registered ton if lying elsewhere. If a vessel requires a Government buoy a fee of HK \$30 p.a. will be chargeable;

(b) Duty on all stores, fuel and lubricants for ships of more than 60 tons net register engaged in the Expedition may be exempted;

(c) There is no custom formality for the entry and embarkation of scientific equipment and stores needed for research vessels.

(d) There is no custom formality for transshipment from ship to home or other laboratories of scientific species

collected by the research vessels; and

(e) Hong Kong has no coastal waters of significance from a fisheries point of view and will assume full responsibility for any necessary studies.

I should appreciate being sent the operation schedule as soon as it is available and should also be grateful for the earliest possible information concerning research vessels planning to visit Hong Kong. These should be sent to the Director, Fisheries Research Station, Agriculture and Fisheries Department, Shek Pai Wan Road, Aberdeen, Hong Kong.

U.S.A.: 10 June 1965.

From Robert H.B. Wade,  
Minister for UNESCO Affairs.

Dear Dr. Fedorov;

Your circular letter 85 (AVS. 9/21D) of 18 March pointed out that Members of the Intergovernmental Oceanographic Commission can assist the work of the Cooperative Study of the Kuroshio by furnishing to participating vessels the assistance and facilities commonly accorded to visiting government vessels. You requested information on the policy of the United States Government with respect to certain facilities specified in your letter. As you know, the United States is a participant in the program, and it will do everything possible to facilitate entry of participating research vessels into United States ports and to facilitate clearance, if it should be requested, for research within United States territorial waters. Should vessels desire to use facilities in the Trust Territory of the Pacific Islands, this would be subject to conditions of the Trusteeship Agreement.

In facilitating clearance and entry into United States ports of the research vessels of this program, the United States will, of course, follow existing laws and regulations which are applicable to such activities. In response to your inquiry regarding specific facilities for vessels participating in the Kuroshio research program, we are preparing a summary of the laws and regulations that apply. This information will be furnished to you when it has been assembled.

You also requested the name of the agency in the United States to which the operations schedules of vessels planning to visit United States ports should be sent. Such schedules should be sent to the United States National Coordinator for the Cooperative Study of the Kuroshio, with a copy to this office for

transmittal to the Department of State. Requests for clearances for public vessels to enter ports of the United States should be transmitted through normal diplomatic channels.

Viet-Nam: 1 June 1965. From Nguyen-Dinh-Hoa,  
Secretary-General, National  
Commission of Viet-Nam for UNESCO

Mr. Secretary; (Original; French)

I have the honour to refer to your letter cited at reference and to inform you that according to the present grave conditions in our country, our Government regret very much to be not able to furnish any assistance to vessels participating in the Cooperative Study of the Kuroshio.

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II. REPORTS ON THE USSR RESEARCHES FOR THE INTERNATIONAL PROGRAM,  
CSK. (Original; Russian)

The program of the USSR expedition in the Kuroshio region is part of the general international program of the cooperative study of the Kuroshio which was agreed and adopted by the 3rd Meeting of International Oceanographic Commission (June 1965).

Principal problems of the researches are as follows;

1. Study on space and time variations of vertical and horizontal structures of the Kuroshio and adjacent regions.
2. Study on the zones of subpolar and subtropic fronts and the influence of frontal processes upon formation and variation of vertical and horizontal structures of the Kuroshio and adjacent regions.
3. Study on the tropical zone, where intermediate waters are raised to the surface, and its relation to the processes caused by hydrological and hydrochemical structures of the region.
4. Biological and fishery researches (they executed by a special program).

5. Study on space and time variations of the vertical structure and circulation of the atmosphere in the Kuroshio and adjacent regions.

6. Study on the relief of the bottom of the sea and on the geological structure of the region.

For execution of the proposed problems, the researches of our expedition are conducted in the following directions;

1. Synoptic oceanographic survey of the region.
2. Several-day stations for observations of principal hydrological and hydrochemical elements.

In accordance with the plan prepared and recognized by the First Meeting of the International Coordinating Group for the Cooperative Study of the Kuroshio, the researches of the USSR expedition in the region of the Kuroshio is commenced in the first half of July 1965.

The following research ships participate in them;

"U.M. Shokalski"  
"Uliana Gromova"  
"Jemchug"

The research ships "U.M. Shokalski" and "Uliana Gromova" are equipped with for the complex of meteorological, hydrological and hydrochemical observations, and they will conduct such observations in accordance with international program at mid-depth (down to 2000 m) and deep stations, as well as at several-day stations in the southern part of the Kuroshio.

The scientific research ship "Jemchug" is equipped with mainly for hydrobiological studies. Hydrological and hydrochemical observations on board this ship will be made within a limit restricted to the depth of 1000 m.

Hydrobiological observations on board the "Jemchug" are expected to be the following works;

1. Sampling of macroplankton (euphausiids, salps, doliolids and other organisms) with the help of the Isaacs-Kidd net (length of the board being 160 cm and mesh apertures 6 and 4 mm).
2. Sampling of medium-sized plankton with the help of standard net of Jaday (diameter of entrance, aperture 37 cm, silk sieve No. 38).

3. Sampling of phytoplankton with the help of a depth meter at depths of 0, 25, 50 and 100 m.

Quantity of macroplankton organisms in the sample is determined en route by the weight method.

Quantity of each species of plankton is determined by Yashkov's method with the help of volumeter.

Principal species of plankton are similarly determined.

Besides, on board the "Jemchug" there will be made ichthyographic works including observations of individual species of the ichthyic fauna.

The USSR research ships will, in accord with the international plan of operations in the summer of 1965, carry out observations in the zone of Kuroshio and in the subtropic zone so far as 20° N (see scheme of sections). Position of the sections is adopted by taking account of the sections in charge of Japanese vessels.

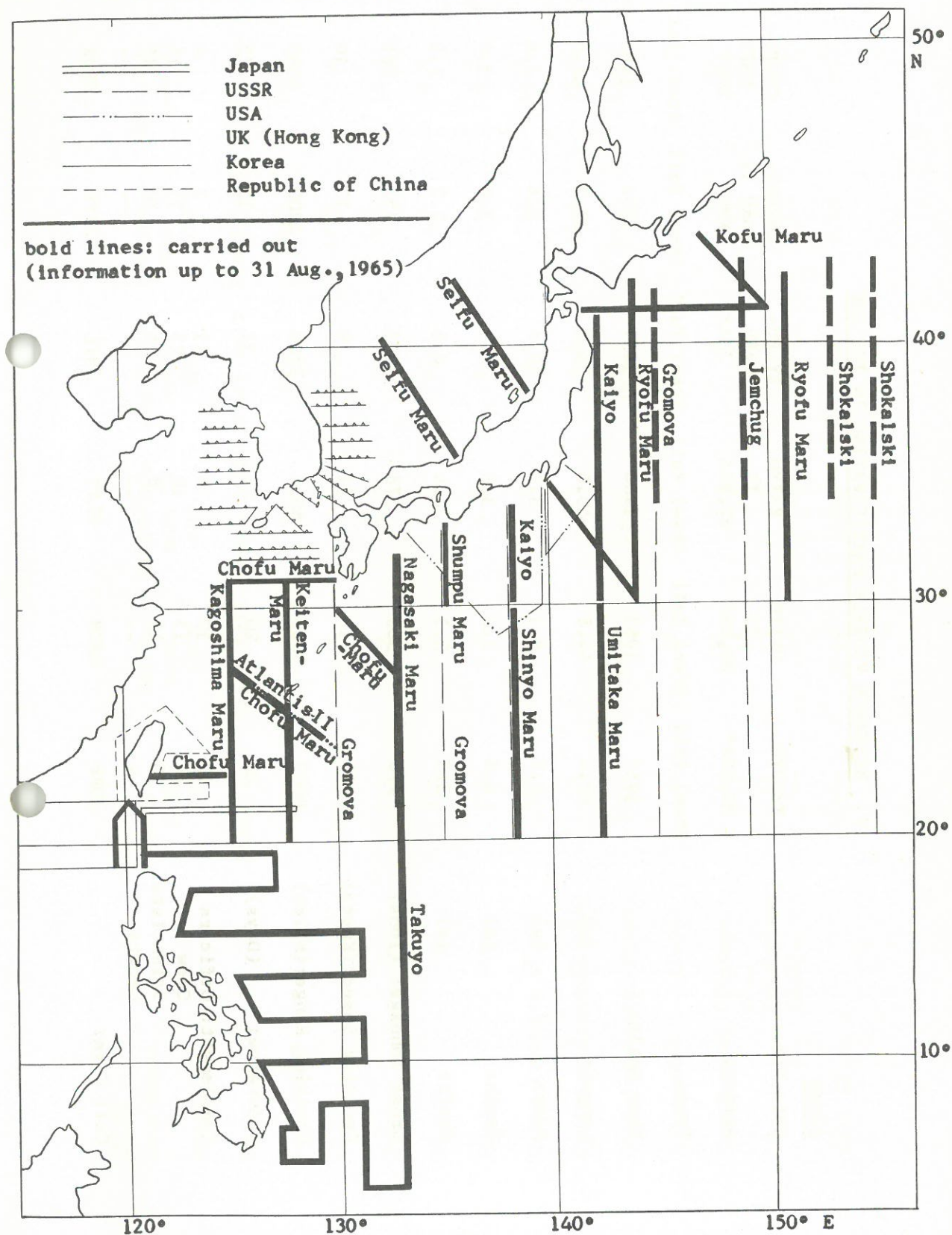
Numberings of the USSR sections are accepted in accord with the general plan, of which the execution by the participant countries in the cooperative study of the Kuroshio and adjacent regions by the understanding at the First Meeting of International Coordinating Group of CSK should be commenced in 1966 (see material of the Meeting of International Coordinating Group, Manila, 8-11 February 1965). In summer the following sections are executed;

No. 3	145° E	42°-34° N
No. 5	149° E	43°-34° N
No. 8	153° E	43°-34° N
No. 9	155° E	to 20° N
No. 10	130° E	to 20° N
No. 11	135° E	to 20° N
No. 12	138° E	to 20° N
No. 15	145° E	34°-20° N
No. 16	149° E	34°-20° N

In case the synchronization, expected by the above-mentioned plan of the operations of USSR and Japanese vessels in these zone could be achieved and finally the first cooperative observations were carried out already on the beginning stage, then a satisfactory characterization of the spatial structures of subpolar front and the Kuroshio region will be obtained, and this will come to be the basis for future study on the temporal variation of the front.

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### III. CRUISES FOR SYNOPTIC SURVEY, SUMMER 1965



IV. RESEARCH VESSELS PARTICIPATING IN THE CSK

JAPAN

Ship Name:	TAKUYO	MEIYO II	KAIYO II	RYOFU- MARU	SHUMPU- MARU II	CHOFU- MARU
Agency:	HD,MSA*	HD,MSA	HD,MSA	JMA*	KMO*	NMO*
Type:	Steel full	Steel full	Steel full	Steel full	Steel full	Steel full
Year Built:	1957	1963	1964	1937	1954	1960
Length:	(m) 62.4	44.8	40.6	74.2	32.2	42.0
Beam:	(m) 9.5	8.1	8.0	10.6	6.4	7.4
Depth:	(m) 4.8	3.8	3.8	5.1	3.0	3.8
Draft:	(m) 3.3	3.1	2.4	4.6	2.2	2.9
Gross Tonnage: (Tons)	770	360	378	1201	152	266
Cruising Speed:(Knots)	12	10	11	9	10	10
Cruising Range:(Miles)	8000	5000	6000	7200	4000	6000
Endurance: (Days)	20	20	25	37	15	25
Complement: Officers	12	10	4	11	7	8
Crew	24	15	18	25	11	15
Scientists	15	15	8	26	10	15
Cadets	--	--	--	--	--	--
Call Sign:	JDRP	8JCM	8LYT	JHIL	JBPH	JPQX

JAPAN

Ship Name:	KOFU- MARU	SEIFU- MARU	KAGOSHIMA- MARU II	KEITEN- MARU	SHIYO- MARU II	UMITAKA- MARU II
Agency:	HMO*	MMO*	KU*	KU	TUF*	TUF
Type:	Steel full	Steel full	Steel full	Steel full	Steel full	Steel full
Year Built:	1963	1964	1960	1954	1963	1955
Length:	(m) 47.0	48.5	60.5	36.0	47.2	73.4
Beam:	(m) 7.7	7.8	10.8	7.0	7.8	11.3
Depth:	(m) 3.8	3.8	5.4	3.4	4.0	5.5
Draft:	(m) 2.9	2.8	4.3	2.7	3.4	4.5
Gross Tonnage: (Tons)	335	355	1038	267	382	1453
Cruising Speed:(Knots)	11	10	13	9.5	11.5	13.0
Cruising Range:(Miles)	8000	8400	13000	12000	8500	14400
Endurance: (Days)	30	30				
Complement: Officers	10	10	15	9	8	15
Crew	15	15	27	20	14	36
Scientists	15	15	5	3	2	11
Cadets	--	--	48	20	44	56
Call Sign:	8JNZ	JPVB	JABM	JBOO	JGAN	JMKF

JAPAN

Ship Name: OSHORO- MARU III HU\* Steel full 1962 66.7 (m) 11.8 (m) 5.4 (m) 4.3 (m) 1181 12.5 11000 13 27 6 56 13 20 6 56 13 20 6 56  
Agency: NAGASAKI- MARU II NU\* Steel full 1964 43.0 (m) 8.8 (m) 5.0 (m) 3.7 (m) 563 11 9000 20 48  
Type: TANSEI- MARU ORI, UT\* Steel full 1963 40.0 (m) 7.4 (m) 3.7 (m) 258 10.0 7500 13 10  
Year Built: 1962 1964 1963  
Length: (m) 66.7 43.0 40.0  
Beam: (m) 11.8 8.8 7.4  
Depth: (m) 5.4 5.0 3.7  
Draft: (m) 4.3 3.7 3.7  
Gross Tonnage: (Tons) 1181 563 258  
Cruising Speed:(Knots) 12.5 11 10.0  
Cruising Range:(Miles) 11000 9000 7500  
Endurance: (Days) JCDN JDRI 8JDG  
Complement: Officers 13 13 10  
Crew 27 20 13  
Scientists 6 10  
Cadets 56 48 --

Call Sign: JCDN JDRI 8JDG

\* HD,MSA: Hydrographic Division,  
Maritime Safety Agency  
JMA: Marine Division, Japan  
Meteorological Agency  
KMO: Kobe Marine Observatory, JMA  
NMO: Nagasaki Marine Observatory,  
JMA  
FMO: Hakodate Marine Observatory,  
JMA  
MMO: Maizuru Marine Observatory,  
JMA  
KU: Faculty of Fisheries,  
Kagoshima University  
TUF: Tokyo University of  
Fisheries  
HU: Faculty of Fisheries,  
Hokkaido University  
NU: Faculty of Fisheries,  
Nagasaki University  
ORI,UT: Ocean Research Institute,  
University of Tokyo

KOREA

Ship Name: BUKHANSAN KERIM CHOPOONG NO.1 SURO  
Call Sign: HLLQ HLLIO HLHG HLHG Unidentifide

U.K. (Hong Kong)

Ship Name: CAPE ST. MARY  
Call Sign: VPTW

15

U.S.S.R.

Ship Name: U.M. SHOKALSKI ULIANA GROMOVA JEMCHUG  
Call Sign: UNAZ UQCB UZTZ



V. CSK WORKING COMMITTEE

In order to assist the job of the International Coordinator, a Working Committee was set up inside the Japanese National Commission for UNESCO, 4-3, Kasumigaseki, Chiyoda-Ku, Tokyo, JAPAN.

The member are as follows;

Kiyoo Wadati	Chairman
Yoshio Nakamura	Secretary
Takashi Ino	Member
Ryuzo Marumo	Member
Jotaro Masuzawa	Member
Daitaro Shoji	Member
Ken Sugawara	Adviser
Michitaka Uda	Adviser

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VI. KUROSHIO DATA CENTER

(Ref. 6.2. Manila Report)

Japanese Oceanographic Data Center was established on 1 April 1965 inside the Hydrographic Division, Maritime Safety Agency, Japan. As recommended at the Meeting of the International Coordinating Group for the Cooperative Study of the Kuroshio and Adjacent Regions at Manila 8-11 February 1965, JODC will serve as the Data Center for CSK.

CSK data and informations should be sent to JODC.

Japanese Oceanographic Data Center,  
Hydrographic Division, Maritime Safety Agency.  
5-1, Tsukiji, Chuo-Ku, Tokyo, JAPAN.  
Director, Dr. Daitaro Shoji.

Other members are Messrs. Shozo Yoshida, Jun Okumoto, Akira Ohashi and Miss Kiyoko Tamura.

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