1 OF 1

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

JPRS L/9066 1 May 1980

## Japan Report

(FOUO 11/80)



#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

For further information on report content call (703) 351-3067 (Japan, Korea, Mongolia); 351-2760 (Vietnam, South and East Asia).

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

JPRS L/9066 1 May 1980

# JAPAN REPORT (FOUO 11/80)

## CONTENTS

## POLITICAL AND SOCIOLOGICAL

'YOMIURI' Views LDP Strategy in Upper House Elections (Raisuke Honda; THE DAILY YOMIURI, 5 Apr 80)	1
'JIJI' Poll Shows Support for Ohira Cabinet Declined in March	
(JIJI, 3 Apr 80)	4
'JAPAN TIMES' Views New Anti-Ohira LDP Group, Hamada Case	
(Minoru Shimizu; THE JAPAN TIMES, 10 Apr 80)	6
'SANKEI' Editor Criticizes Government's Diplomacy (Tei Tomoda; SANKEI SHIMBUN, 21 Dec 79)	8
U.SJapan Relations Analyzed 'Not Partnership of True Parity'	
(Takuya Kubo; ASAHI SHIMBUN, 13 Mar 80)	13
Expert Urges U.S. To Examine Itself, Cure Its Own Disease First	
(Fuji Kamiya; SANKEI, 19 Mar 80)	15
United States' Boycott of Olympics Discussed (Editorial; THE JAPAN TIMES, 16 Apr 80)	18
'JAPAN TIMES' Comments on Carter-al-Sadat Talks (Editorial; THE JAPAN TIMES, 14 Apr 80)	20
'AKAHATA' Comments on DSP Congress (JPS, 16 Apr 80)	23
Newspaper Interviews Sakata on New Security Panel (Y. Ikenagaga; THE JAPAN TIMES, 7 Apr 80)	24
- a -   [III - ASIA - 111	FOUO

## CONTENTS (Continued)

(THE JAPAN TIMES, 16 Apr 80)	26
Former Minister Calls for Defense Goods Export Study (Kiichi Miyazawa Interview; THE JAPAN TIMES, 14 Apr 80)	27
MILITARY	
Briefs Centralized Command Planned	30
ECONOMIC	
Banks Forecast Sharp Rise in Industrial Investments (MAINICHI DAILY NEWS, 9 Apr 80)	31.
'JAPAN TIMES': MITI, Keidanren Agree on Foreign Coal Investment	
(THE JAPAN TIMES, 7 Apr 80)	32
Japanese Scrambling for Coal Development, Import Action (NIKKEI SANGYO SHIMBUN, 4 Mar 80)	34
Efforts To Trim Oil Imports Fail (THE JAPAN TIMES, 15 Apr 80)	40
Steel Firms Agree To Halt New Iran Contracts (THE JAPAN TIMES, 15 Apr 80)	41
Briefs New Zealand Trade Mission	42
Treasury Bills Purchases Discouraged	42
SCIENCE AND TECHNOLOGY	
Laser Induced High Temperature Chemical Process Developed	
(NIHON KOGYO SHIMBUN, 8 Mar 80)	43
Zone Heating Doubles Strength of Synthetic Fiber (NIKKAN KOGYO SHIMBUN, 18 Feb 80)	45

- b -

POLITICAL AND SOCIOLOGICAL

'YOMIURI' VIEWS LDP STRATEGY IN UPPER HOUSE ELECTIONS

OW080924 Tokyo THE DAILY YOMIURI in English 5 Apr 80 p 3 OW

["Political Beat" column by Raisuke Honda: "Divide and Conquer"]

[Text] Faced with ominous signs of the power balance in the House of Councilors possibly being reversed in the opposition's favor in the coming upper house election, Prime Minister Ohira and his close aides opposition parties into disarray by making an issue of national defense and other matters on which their opinions are divided.

Indications are that the premier and his confidents plan to entice the opposition into engaging in policy debates with the ruling Liberal-Democratic Party (LDP) over such "divisive" matters as atomic power generation and administrative reform as well as defense problems.

Ohira, in a bullish gesture, has declared his "determination" to secure 63 seats or more for the LDP in this summer's upper house election.

The current political situation, both on the domestic and external fronts, is increasingly severe for the LDP.

First of all, sharp rises in prices in past months threaten to touch off another round of galloping inflation.

The government says it is confident of stabilizing prices before June.

But the current upward price trend, especially the hectic rise by nearly 20 percent per annum in land prices in big cities, make it highly questionable whether this year's inflation rate could be kept within the government-set target of 6.4 percent.

The current series of plunges in the yen's value are also certain to affect adversely the domestic price situation.

In addition, public criticism of the alleged gambling by LDP Dietman Koichi Hamada at a Las Vegas casino is really a bone in the throat for the ruling party.

1

Ξ

#### FOR OFFICIAL USE ONLY

Although the LDP has decided to settle the matter through its disciplinary committee, any settlement convincing enough for a majority of the people could hardly be hoped for.

It is a foregone conclusion that the opposition parties in their upper house election campaigns will play on these weaknesses of the LDP.

Besides, the Socialist (JSP), Democratic-Socialist (DSP) and Komeito parties have been going smoothly in their arrangements for cooperation in many constituencies for the upper house election.

Under the circumstances, Premier Ohira and his aides are trying to make an issue of defense, atomic power and administrative reform problems apparently with a view to exploiting differences among the opposition over these matters and thus parrying their attacks on prices and the Hamada problem.

Regarding the defense issue, opposition parties have remained wide apart because of their different views on the Japan-U.S. security treaty and the Self-Defense Forces.

The differences are especially salient between the JSP, which made a point of insisting on Japan's "unarmed neutrality" until quite recently, and the DSP, which virtually maintains the same stand as the LDP over the defense issue.

Ohira and his aides count on nullifying the basic agreement between the JSP, DSP and Komeito for a coalition government if they bog down in discussing the government moves for enhancing Japar's defense capability, informed LDP sources say.

Ohira might expect similar "divisive" debates also on the issue of atomic power generation.

While the LDP is committed to positively encouraging the use of nuclear energy as an alternative for oil, the JSP has come out with strong objection even against the operation of the existing nuclear power plants and still more the projects to construct additional plants.

The JSP's stand is substantially different from that of the Komeito, which gives conditional agreement to the promotion of nuclear power generation and also the DSP's attitude agreeing fully with the LDP on the matter.

Concerning the government-proposed administrative reform, which involves a large-scale personnel curtailment of the government machinery, the Komeito and DSP have given clear-cut approval.

The JSP, however, is opposed to the streamlining plans because of the party's heavy dependence on trade unions of government employees.

2

Ohira has therefore placed hopes that the three issues, if made major issues in the election campaigns, will lead to the collapse of the election cooperation arrangements among the three opposition parties.

Chances, however, might be slim of the premier's hopes becoming successful, since none of the opposition parties and, for that matter, the general public, too, are not that stupid as to be fooled by such cheap tricks.

COPYRIGHT: The Daily Yomiuri 1980

CSO: 4120

3

POLITICAL AND SOCIOLOGICAL

'JIJI' POLL SHOWS SUPPORT FOR OHIRA CABINET DECLINED IN MARCH

OW031305 Tokyo JIJI in English 1223 GMT 3 Apr 80 OW

[Text] Tokyo, April 3 (JIJI Press)--The popularity rating of Prime Minister Masayoshi Ohira's cabinet fell to 25.5 percent in March from 27.6 percent in the preceding month, according to the latest opinion survey by JIJI Press.

The rate thus has dipped below 27 percent for the first time in four months.

Non-supporters rose from 44 percent to 45.1 percent, while the "don't know" answer came from 29.4 percent, up from 28.4 percent.

The opinion survey was conducted for four days from March 10 after the government's budget for fiscal 1980 starting this month, though voted down at the House of Representatives budget committee, later passed the lower house at a plenary session on March 8. The bill was immediately sent to the House of Councillors.

The support ratio for the ruling Liberal-Democratic Party declined from February's 29.8 percent to 28.9 percent and that for the Japan Socialist Party, the nation's largest opposition, from 10.1 percent to 7.2 percent.

The Japan Communist Party and the middle-of-the-road Democratic Socialist Party fell from 2.3 percent and 3 percent to 1.5 percent and 2.4 percent, respectively.

However, the Komeito (clean government party) was supported by 5 percent, up from 3.3 percent, and the New Liberal Club by 0.6 percent, up from 0.2 percent.

The survey covered 2,000 adults selected by the random sampling method across the country. Of them, 1,515 or 75.8 percent replied.

When asked about the nation's price trends, as high as 95.3 percent replied they think prices will go up.

As for business trends in general, the combined ratio of those who think business is worsening slightly or definitely was 39.8 percent, down from 48 percent in February.

However, about 60 percent or much the same as in the previous month said they are worse off than a year before.

Earlier, the prime minister's office reported on Feb. 29 that Tokyo's consumer prices in February climbed 7.6 percent over the preceding month and 0.5 percent over the same month of last year.

On March 11 or during the opinion poll, the Bank of Japan announced whole-sale prices in February surged up 21.4 percent over a year earlier. This was the first time in five years and three months since November 1974 that the annual gain had surpassed 20 percent.

COPYRIGHT: Jiji Tsushinsha 1980

CSO: 4120

POLITICAL AND SOCIOLOGICAL

'JAPAN TIMES' VIEWS NEW ANTI-OHIRA LDP GROUP, HAMADA CASE

OW110549 Tokyo THE JAPAN TIMES in English 10 Apr 80 p 12 OW

["Politics Today--and Tomorrow" column by Minoru Shimizu: "Official Stand vs. Actual Intentions in Politics"]

[Excerpts] Nineteen Liberal-Democratic Dietmen belonging to the antileadership camp last week organized a new body called the LDP Reform League, whose professed aim is to inculcate political ethics and tighten moral discipline among politicians and government officials. According to Osamu Inaba, one of the organizers of the new group, the league is a suprafactional organization set up for the common goal of political reform.

However, the group is actually faction-oriented because it is composed of members of the anti-leadership factions led by former Prime Minister Takeo Fukuda, former Prime Minister Takeo Miki and former LDP Secretary General Yasuhiro Nakasone. Observers have pointed out that the league was formed with the aim of consolidating the anti-Ohira forces.

During the inaugural gathering of the league, one member was heard to say that the longer the Ohira administration lasted, the deeper would be the suffering of the nation.

It was the Hamada case that triggered the formation of the new group among the opposition. Indeed, the shock waves generated by the Hamada case have shaken both the LDP and the Diet as a whole over the past month.

Ohira is being very cautious in handling the case probably because he cannot disregard Tanaka's intentions. The prime minister, however, is well aware of the strong public demand for the truth and is therefore in a tight spot as to how to settle the matter. The prime minister and LDP executives are known to be hoping that Hamada will voluntarily leave the party.

A Tanaka faction leader said that the anti-leadership camp was trying to drive a wedge between the Tanaka and Ohira groups. Another Tanaka group leader said that the LDP received a request from the opposition parties that

6

FOR OFFICIAL USE ONLY

Ī

#### FOR OFFICIAL USE ONLY

the LDP settle the matter within the party rather than by summoning Hamada to the Diet. And this is a rumor that has been widely circulating in political circles.

This apparently has something to do with comments Hamada made in an interview with a vernacular daily that if he were to be summoned to the Diet "for having engaged in gambling at a legal casino, then both LDP and opposition Dietmen who practice high-stakes gambling in the country, where gambling is illegal, must also be summoned" and that he would "expose the corrupt relations between the LDP and the opposition."

The Hamada case has caused a number of rumors to circulate, each reflecting the dark undercurrents of Japanese politics. Although demands have been made for a thorough investigation of the Hamada case for the sake of political reform, what actually has been done is to hush it up as in many similar cases involving politicians in the past. The anti-leadership camp's formation of the new group is intended, in fact, to jolt Ohira rather than delve into the Hamada case. Official stands and actual intentions are often different, but even more so in political circles as this current development would indicate.

COPYRIGHT: The Japan Times 1980

CSO: 4120

POLITICAL AND SOCIOLOGICAL

'SANKEI' EDITOR CRITICIZES GOVERNMENT'S DIPLOMACY

Tokyo SANKEI SHIMBUN in Japanese 21 Dec 79 p 3

[Article by Tei Tomoda, SANKEI SHIMBUN editor]

[Text] In the midst of economic dispute between Iran and the United States, which was triggered by the case of American hostages held in Tehran, flames of anti-Japanese criticism over Japan's lack of cooperation with its ally have shot up high in the United States. On 18 December such prospects were tentatively "extinguished," as the U.S. Senate Foreign Relations Committee withdrew a resolution critical of Japan. But a solution to the U.S. Embassy hostage issue has not yet been clearly worked out. Rather there may even be possible escalation of [this hostile] situation, as in the Iranian oil minister's declaration that "there will be retaliation if Japan exercises self-restraint in purchasing Iranian crude oil," and there is a strong possibility that the same situation may be repeated in other Middle Eastern countries as well. In that case, Japan, which is so heavily dependent on Middle Eastern Oil, would certainly be trapped in a dilemma with the United States.

We have to admit the fact that the Japanese side handled the case very poorly in this situation on the whole. It is an invaluable experience for Japanese diplomacy," a high-ranking official of the Ministry of Foreign Affairs grumbled, while at the same time sweating with considerable stress.

Indecisive Government

It certainly has not been a very long time since Japan received a great "shock" of this kind in its foreign relations with the United States.

One may well remember the incident in which Foreign Minister Okita was confronted in Paris on 10 December by the usually calm Secretary of State Vance, who expressed his undisguised dissatisfaction and said that "what the Japanese had done was insensitive." His statement triggered an explosion of anti-Japanese sentiment within the United States. Telephone calls

8

of protest poured into consulates and offices of corporations located in various parts of the U.S., not to mention the Japanese Embassy in Washington. Among them were unpleasant and more like threatening calls, and some people talked about "puncturing every tire of Japanese-made cars."

What has caused the American people to become so disturbed? First, what provoked the Americans most was the case in which Japanese firms bullied the market by paying exorbitant price of about \$40 a barrel to buy up twothirds of the crude oil that had been originally bound for the United States, but became surplus during the U.S. embargo of oil import from Iran. "Thieves taking advantage of others in trouble and stealing during a fire" were what the American people saw in the actions of the Japanese. The second point is that there had been news reported that instead of cooperating with the United States that was applying its financial pressures on Iran by declaring a freeze on Iranian assets and suspension of credits, Japanese banks have been doing the opposite by giving "advice" to Iran. Here too, is [an action] that has angered the American people and caused them to say "just what kind of ally is Japan to the United States?" The third point is that the position of the Japanese Government on Iranian actions in occupying the embassy and taking hostages of the embassy staff has been indecisive.

#### Growing Sources of Friction

Still this does not mean that these three actions [claimed to have been taken by Japanese firms] are not entirely true. The so-called secret assistance to Iran on the financial matters is a groundless accusation. Then what kind of a lesson has this "10 days of tension in Japanese-U.S. relations" offered to the Japanese?

The leaders of the Ministry of Foreign Affairs pointed out the following four "lessons" for the Japanese to take into consideration:

- --The decline of American economic strength and the Japanese gain in economic power has become a hotbed of anti-Japanese resentment;
- --It is essential to understand that the Americans can become, under a certain situation, very emotional;
- --We must be particularly careful during the presidential election year;
- --In order not to become an excitable loner, Japan should keep step with the European countries.

Yet this is only one side of the picture. "What I feel keenly is—while I look back at the circumstances of each event—the Japanese (position was always a defensive one) hiding behind [the U.S.] from beginning to end.

9

Until Japan was subjected to the explosion of angry emotion in the U.S. the government persistently maintained the posture of "not provoking either the United States or Iran." Take the case of the Iranians taking the U.S. Embassy staff as hostages. Even though the Japanese Government once made a statement indicating that what the Iranians did was deplorable, no tough criticism was fired off.

An important part of the European and American mentality is a serious concern for basic principles. The inviolable nature of a foreign embassy and its staff has been established in international law, and attacking this is obviously counter to basic principles. Whatever the circumstances might be, whenever a fundamental principle is violated it must be thoroughly opposed. European nations who have been just as heavily dependent on Iranian oil have clearly denounced Iran on this point. Although Japan is unable to aline itself with American economic sanctions, it would have been best for Japan to have very clearly criticized the hostage situation from the start.

Moreover, what made the matter more harmful in the long run was that a Ministry of Foreign Affairs opinion did come out denouncing the hostage action it was hastily made only after having been hit hard by the United States. [With this sort of behavior] an impression such as "if Japan is hammered with criticism, it will bend" would firmly be fixed in the minds of the Americans. We are concerned about a possible rekindling of economic frictions with Europe and the United States at this time and to repeat a bad precedent would simply make the situation worse.

However, the most important thing is that Japan has not made an effort to make its point of view understood. After Japan was hit with a barrage of criticism, government leaders began frequently insisting that they "would like the U.S. to understand that our firms were forced to buy high-priced Iranian crude oil due to the fact that the major international oil corporations' supply of oil to Japan was drastically cut." Since the U.S. is already angry at Japan, it wouldn't matter how well Japan explained its position to the U.S., as such an explanation would be taken, in any event, as a mere excuse.

Why didn't the government strongly argue, at the beginning of the U.S.-Iranian dispute, that the major oil producers' decision to cut Japan's oil supply would drive Japan into a dangerous situation where it could no longer take the same steps as those of the U.S.? We cannot brush this issue aside by saying it's all because Japan simply doesn't have the right spirit to conduct good public relations with the U.S. We clearly recognize that there are shortcomings on the Japanese side in that it lacks strategic measures and course of action.

10

In an age where we must take the initiative and come up with the first move [to survive], not to have this strategic position is probably the greatest concern. And now, we must not forget that great changes are taking place in the circumstances that surround diplomatic relations.

Japan Should Not Depend on the United States for 0il

A high-ranking official of the Ministry of Foreign Affairs has pointed out, "The hostage issue in Iran challenges international law and internationally-accepted practices and more cases similar to this are likely to follow hereafter, and also the oil situation will be increasingly chaotic. We must give serious consideration on how to deal with these two basic issues. This is certainly the heart of the problem.

The recent state of affairs in the Middle East and the situation of oilbased energy, also including the Iranian problem, are basic factors that will force a reexamination of Japan's diplomacy from its foundations. For example, oil suppliers that hold a lifeline to the Japanese economy are suddenly changing from "the majors" to the governments of oil-producing nations. The amount of Japanese imports from major suppliers declined from 1.4 million barrels a day at the end of last year [1978] to 400,000 barrels in October through December of this year, and our prediction is that it may even go down to zero barrels by April of next year. "Total dependence on the major oil suppliers" means first of all, that the United States, where the headquarters of the major suppliers are located, is no longer reliable as a stable supplier of oil. And conversely, Japan has to "take care of itself" to secure oil. Japan's position to "take care of itself" and to act independently has had immediate repercussions on Japan's foreign relations. The other day Japanese ambassadors to the Near and Middle Eastern nations had a conference and proposed a measure to "strengthen bilateral relations from all possible sides" for the sake of future oil diplomacy. That is to say, this is nothing less than recognizing Japan's need to "take care of itself." Yet at the same time, if such foreign diplomacy to "take-care-of-ourselves" was promoted, there would inevitably be ever increasing conflicts of interest in the market and Japan would be facing a stiff competition with the United States and other advanced nations. The recent Japanese-U.S. confrontation over the Iranian issue could well be the start [of the problem].

Disagreement Among Government Ministries

The second problem is a domestic one. The recent Iranian crisis brought out the difference in opinion between the Ministry of Foreign Affairs and the Ministry of International Trade and Industry, over the issue whether to purchase high-priced Iranian oil on the spot market or not. It is said that while the Ministry of Foreign Affairs warned [trading firms] against "acting like thieves who steal during a fire and angering the United States," the Ministry of International Trade and Industry took the fairly lenient

11

FOR OFFICIAL USE ONLY

position of letting Japanese firms march right out and buy crude oil at such high prices. In a situation where even one wrong step could trigger an irrational worldwide reaction, one cannot hope for a quick and positive world response, if officials within the government differ in their opinion and thinking all the time.

A high-ranking official of the Ministry of Foreign Affairs has expressed his concern and said that "in the meantime Japan will really be in trouble unless we emphasize the need for better coordination in order to maintain consensus of opinion among the government ministries." Don't the government officials, including Prime Minister Ohira, need to tackle this problem immediately and seriously?

COPYRIGHT: Sangyo Shimbunsha 1979

9529-R CSO: 4105

Ξ

12

POLITICAL AND SOCIOLOGICAL

U.S.-JAPAN RELATIONS ANALYZED 'NOT PARTNERSHIP OF TRUE PAPITY'

Tokyo ASAHI SHIMBUN in Japanese 13 Mar 80 p 5

[Article by Takuya Kubo, Executive Director of the Peace and Security Research Council]

[Text] During a recent visit to the United States, I met with persons from various circles, including State and Defense Department officials, scholars, et al., and from the different impressions received, I wish to touch on some problematical issues.

In spite of its massive size and power, the United States is presently rocking like a little boat and beginning to change its course. Domestic problems, such as inflation, which had once been focal points of discussions have been relegated to the background and public interest is centered on the Iranian and Afghanistan problems. The general public and Congress consider the Soviet invasion of Afghanistan as an indication of an expansionist policy and fully support a strong, militaristic response by the government. Some are even criticizing that the President's measures to increase defense expenditures are inadequate.

The current feelings of the American people are well reflected in the public opinion poll conducted in January. According to the poll, 69 percent are greatly concerned about the possibility of a world war, 69 percent feel that it might be necessary to risk a war to maintain world peace (this will probably be used to justify draft), 73 percent approve a military registration system, and 78 percent approve, while 15 percent disapprove, an increase in defense expenditures.

Although the United States is taking a firm military stance against the USSR, even to the extent of shelving SALT II and detente, the allied countries are not in full agreement. There are criticisms that the United States is over-reacting. However, from the standpoint of the United States which is struggling alone, it considers that the countries that would suffer the most from changes in the Middle East oil supply situation created by Soviet emergence, would be the West European countries and Japan. U.S. dissatisfaction is mounting because it is asking, not for the dispatch of any naval ship but at least, the united moral support of its allies.

In the case of Japan, just at the moment when support is increasing for U.S.-Japan security arrangements, doubts are beginning to arise, to the contrary, in the United States as to the significance of the allied relationships. The Department of Defense anticipates the eruptions of localized

13

military conflicts during the 1980's. Under these circumstances, the Americans are probably questioning the extent of joint contributions they can expect from allied countries who are partners in maintaining world peace. With respect to Japan, the deployment of marine forces and use of military bases on Okinawa can become problems.

Another problem with Americans is their national trait and that is, they are very unstable emotionally. On that assumption, to avoid being forced into a disadvantageous position because of sudden policy changes, Japan should first request detailed prior consultation and coordination with the United States. Secondly, to enable preservation of trust in the U.S.-Japan security arrangements, efforts are probably necessary to minimize, in advance, causes which might lead to major frictions between the United States and Japan.

On issues in U.S.-Japan relations, a scholar has commented that economic problems were the issue of the 1970's but defense problems will be the topic of the 1980's. A Japanese Government official states that economic issues posed real problems but were manageable (they can be dealt with somehow). However, for Japan, when it comes to defense problems, it's not an easy thing to handle.

The United States Government has revealed there will be a real increase of 5 percent annually in defense outlays for the next 5 years and NATO countries have pledged 3 percent increases. In this situation, Japan alone has defense expenditures amounting to less than 1 percent of its GNP and the real increase for the next fiscal year is only 1.5 percent. American criticisms are expected to further increase that for a great country with responsibilities toward world peace and dependence on its maintenance, Japan is not taking its share to fulfill its role.

Defense Secretary Brown, who recently visited Japan, is claimed to have requested Japan to make "steady and significant" (sure and noticeable) increases in its defense expenditures. Since this phrase has been used consistently, it must carry great weight for the Americans.

In addition to the problem of defense expenditures, there are numberous defense problems facing the United States and Japan, such as the U.S.-Japan defense set-up, and in conjunction with the security aspects of the Mid-East and Southeast Asia, Japan's role in showing a military presence in the Western Pacific where American forces have thinned out.

As I write this article, the words of a Congressman linger in my memory. Heretofore, U.S.-Japan relations have been similar to that of a "senior" and a "junior" and Japan tried to please the United States. In the future, however, the United States wants Japan to become a full partner who will "call a spade a spade" and criticize and correct American wrongdoings. That is probably a partnership of true parity.

COPYRIGHT: Asahi Shimbun Tokyo Honsha 1980

9134

CSO: 4105

14

POLITICAL AND SOCIOLOGICAL

EXPERT URGES U.S. TO EXAMINE ITSELF, CURE ITS OWN DISEASE FIRST

Tokyo SANKEI in Japanese 19 Mar 80 p 11

[Article by Fuji Kamiya, Keio University Professor]

[Text] Question Capability to Handle Crises

On reflecting upon the past 30 years of U.S.-Japan relations, it appears that the 1950's and 1960's were the decades when Japan pressed its demands and dissatisfactions upon America and the 1970's became a period of position reversal where the United States began to assert its demands and dissatisfactions, one after another, upon Japan. In a nutshell, the criticisms stem from the U.S.-Japan trade imbalance in specialized industries, as well as the economy in general, and the dissatisfactions rest on Japan's "free ride" in security matters. Presently, at the beginning of the 1980's, the United States is taking up the automobile issue, on the one hand, and urgently demanding our industry to yield, while on the other hand, it is assuming a firm stance on defense expenditure increase to get a suitable response by our country. The two issues of trade economics and security guarantee constitute complicated and subtle problems. It is not impossible for an irreparable schism to occur in U.S.-Japan alliance if the two problems become intertwined in some unusual manner because both are difficult issues. Fortunately, at present, such a fear is not too strong because both the United States and Japan are extremely cautious about the occurrence of such a bad union. However, if the problems become unnecessarily entangled because of emotional factors, it is possible that the situation might deteriorate to that point and for that reason, we must solve the two issues calmly and wisely.

As indicated by the sudden turn of events in the Middle East and Southwest Asia, the world of the 1980's reflects new causes and circumstances which differ somewhat from those of the 1970's. Both the United States and Japan are being confronted with the problems of whether they have the capabilities to manage and to handle crises that might arise in the alliance which is rooted in the new international situation. In this article, I wish to take up the automobile problem which is presently the biggest issue in U.S.-Japan relations.

15

Mistaken Outlook Even by Ambassador Mansfield

A year ago, U.S.-Japan relations was preoccupied with the NTT problem (problem of loosening up procurement regulations by the Nippon Telegraph and Telephone Public Corporation [NTT]). The course of events of this problem has many points in common with the automobile problem. First, at that time, I was living in New York and in January of last year, there were not many, as far as the New York financial circle was concerned, who believed that the NTT problem would soon erupt into such a big issue. Actually, within 2 or 3 weeks, however, the situation changed abruptly and by late January, Japan was becoming the target of severe retaliatory measures.

Secondly, just at that time the U.S.-Japan relations, the visit to the United States of Prime Minister Ohira had been scheduled and in the hope of solving the NTT problem prior to the prime minister's visit so that it will not become an obstacle, the Japanese Government dispatched Sonoda in April as a special envoy. This action did not solve the problem, however, and Ohira's visit did take place (late April to early May). In spite of the fact that the problem had become such a thorny issue, matters quieted down during the latter half of the same year. Furthermore, for some strange reasons, without any clear indications as to what concrete concessions Japan made to the United States, the situation was settled on the basis of overall cooperation, in principle. This event revealed that the Japanese attitude, which was not yielding except to strong foreign pressure, has great faults while the American demands were not necessarily within the realm of economic accountability and as indicated by the foregoing course of events, the NTT problem was a strongly politically-colored issue.

What is the present status of the automobile problem? First, this problem accelerated into a hot issue from early February of this year when Fraser president of the United Auto Workers, visited Japan. Here is an item of interest. This is the text of the speech given by the U. S. Ambassador to Japan, Mansfield, at the Nippon Kisha [News Reporters'] Club on 28 January of this year. The speech was titled, "A Fruitful Partnership and New Challenges," and presented the future outlook of U.S.-Japan relations at the start of the 1980's. Befitting the illustrious Ambassador Mansfield, the speech was fluent in composition and accurate in analysis and contained constructive criticisms on various problems facing the future development of U.S.-Japan partnership. A point of considerable interest is that although this speech covered practically all of the problems, big and small, anticipated in U.S.-Japan relations, it did not mention the word "automobile" even once (despite the mention of steel and color TV). This appears to be an indication that, at the time, even the U.S. Ambassador to Japan did not anticipate that the automobile problem would become such a big issue in the near future.

Persuade the Unthinking Americans

Secondly, in case Toyota and Nissan decide not to establish factories in the United States, will the Americans go so far as to ban imports of Japanese automobiles as the anti-Japanese hawks testified at the public hearings of

16

#### FOR OFFICIAL USE ONLY

the subcommittee on trade of the House Ways and Means Committee? That is not thinkable. I do not completely support whatever Japan does and at times, I have advocated that Japan should consider making concession even if they were not economically feasible. However, I do not advocate immediate acceptance, without questioning, of the highly political remarks of a union leader of one industry, no matter how big, and the arguments of politicians who want to utilize those remarks to win reelections, whether they be the president or congressmen.

Trying to persuade Toyota and Nissan is important, at times, but I think that we should try even harder to persuade the unthinking Americans, including industries and labor unions, which are ever susceptible to the plight called the "American disease."

COPYRIGHT: San Gyo Keizai Shimbunsha 1980

9134

CSO: 4105

17

POLITICAL AND SOCIOLOGICAL

UNITED STATES' BOYCOTT OF OLYMPICS DISCUSSED

OW170450 Tokyo THE JAPAN TIMES in English 16 Apr 80 p 14

[Editorial: "The USOC Decision"]

[Text] Yielding to political and financial pressures brought to bear by the Carter administration, the U.S. Olympic Committee (USOC) has voted by more than a 2-1 margin to boycott the summer Olympic Games in Moscow. The two-thirds majority of the committee delegates thus came to share their government's view that world as well as U.S. national security is threatened because of the Soviet intervention in Afghanistan.

The example set by the USOC is expected to have a strong effect on governments and national olympic bodies of U.S. allies, inducing them to produce parallel decisions. The allied governments and olympic committees have been waiting to see how American sport officials make up their minds.

Our own government and national olympic committee are still biding their time to watch out public opinion at home and reaction in other countries to the stand taken by the USOC. But the centrality of solidarity with the U.S. in a time of crisis, as pointed out by both Prime Minister Masayoshi Ohira and Foreign Minister Saburo Okita, would seem to leave not much room for this country to decide differently.

Neither organizing for nor taking part in a world sport festival of the scale of the olympic games is possible any longer today without an extensive involvement by national governments. Even without the Russian conquest of Afghanistan, the modern olympic games could not be separated from politics.

Even allowing for the acute deterioration in the international political situation in recent months, tactics employed by the Carter administration to win USOC compliance with its games boycotting policy proved equally unusual. It is reported to have threatened, among other things, to deny participating U.S. athletes passports, to cease government subsidies, withdraw a tax privilege on donations to the USOC and clamp an embargo on shipments of equipment and supplies by U.S. media preparing for the coverage of the Moscow games.

18

#### FOR OFFICIAL USE ONLY

In spite of the apparent excesses committed by the U.S. Government in forcing its will on individual sport officials and athletes, politics deserve the first priority in the present instance even for once. Seeing economic sanctions and a U.N. condemnation failing to sway Moscow even an iota as it goes about completing its control over Afghanistan, we have no better way to answer the Soviet arrogance in believing that it can both host a world festival of peace and friendship and get away with a decisive geopolitical advantage in a sensitive area unchallenged.

COPYRIGHT: The Japan Times 1980

CSO: 4120

19

POLITICAL AND SOCIOLOGICAL

'JAPAN TIMES' COMMENTS ON CARTER-AL-SADAT TALKS

OW150521 Tokyo THE JAPAN TIMES in English 14 Apr 80 p 14

[Editorial: "Crucial Palestine Autonomy Talks"]

[Text] Egyptian President Anwar al-Sadat's talks with President Jimmy Carter last week were the start of new efforts to solve the Palestinian problem, and this process will continue this week when Israeli Prime Minister Menahem Begin visits Washington.

The U.S. officially described the talks with Mr Al-Sadat as "exploratory" and aimed at a search for approaches "to issues that remain unresolved" in the Egypt-Israel Palestinian autonomy talks.

However, Mr. Carter and Mr. Al-Sadat apparently accomplished more than this. After the meetings, President Al-Sadat said, "We agreed on certain specific steps for the purpose of enhancing the prospects on an agreement" for the self-rule of Palestinians.

Since the Egypt-Israel peace treaty was signed March 26, 1979, there has been no real progress in talks, now stalled, on the future rights of 1.1 million Palestinians living in the West Bank and the Gaza Strip which were occupied by Israel in the 1967 War, and apparently the only hope for breaking the stalemate is through the United States.

In Washington, President Sadat said that the "Palestinian problem remains the main source of tension" in the Middle East, and this is correct. For three decades and more, this problem has led to hatred, tension and conflict. With the Palestinian issue left unresolved, war remains a threat to the region. And considering the present political instability in the Middle East, this cannot be allowed to happen.

Israel obviously is reluctant to give up both administrative and military control of the West Bank and the Gaza Strip feeling its security would be endangered. However, Egypt is pressing for full Palestinian autonomy in the occupied areas even in the proposed five-year interim period.

President Al-Sadat questions Israel's concern over security and points out that coexistence with the Palestinians is the only real security for Israel in the long-run. But to ease apprehensions, he has proposed joint Egypt-Israel military supervision.

In addition to finding an acceptable formula for a self-government authority by the Palestinians, there is also the problem of what to do about 120 Israeli settlements in the occupied territories. Ever since the peace treaty, Israel has continued this expansionist policy which has done more than anything else to discredit the Israeli Government.

In any comprehensive settlement, it will have to be decided if the 80,000 Arabs living in East Jerusalem, also annexed during the 1967 War, will share autonomy with the Palestinians in the Gaza Strip and the West Bank. Then too there is the problem of sharing scarce underground water which U.S. officials believe may cause greater debate than the other issues eventually.

The U.S. has never recognized Israel's rights to East Jerusalem, and President Al-Sadat demands that administrative powers revert back to the Arabs with provisions for free access by members of the three faiths—Islam, Christianity and Judaism.

What has disturbed both Cairo and Washington was the failure of Mr. Begin to live up to promises to make gestures of reconciliation with the Palestinians as an initial step. In fact, Israel has tended to tighten rather than ease restrictions on political activity.

The Egyptian position sounds fair and reasonable. However, it must be remembered that Israel is the nation being asked to give up something. And Israel has its own fears and internal political pressures.

The U.S. believes that the May 26 target date, set in a letter accompanying the peace treaty, for a settlement can slip by without causing too much damage. But the U.S. believes that a solution must nevertheless be found quickly.

President Al-Sadat, the voice of moderation in the Middle East and the growing focal point for U.S. policy in the area, risked much in signing a separate peace with Israel. He alienated his Arab neighbors and a failure on the Palestinian problem could isolate him further, even from the more moderate Arab nations. He must take a hard line because he is trying to satisfy the Palestinians who so far have refused to take part in the negotiations.

But what are the chances for success? There appears to be little optimism in Washington or Cairo because Mr. Begin gives no indication of becoming more flexible. The U.S. of course, can exert a certain amount of pressure, but the timing is bad because this is a U.S. election year. As a politician, Mr. Carter must consider the strategically located American Jewish vote.

However, Mr. Carter cannot take the chance of waiting until the election is over to find a breakthrough because diplomatically this could very well

21

#### FOR OFFICIAL USE ONLY

prove a disaster. Therefore, Mr. Carter is talking to both President Al-Sadat and Prime Minister Begin, and decided to move the venue of the Egypt-Israel talks to Washington late this month. Also, there is the possibility of a three-way summit later.

What the U.S. does in this critical situation could determine if modernization and accommodations prevail against fanaticism and violence in the Middle East.

COPYRIGHT: The Japan Times 1980

CSO: 4120

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

'AKAHATA' COMMENTS ON DSP CONGRESS

OW160927 Tokyo JPS in English 0917 GMT 16 Apr 80

[Text] Tokyo Apr 16 JPS--The Democratic Socialist Party opened the 25th National Congress at Kudan Hall, Tokyo, on April 15 for two days. An address delivered by Chairman Ryosaku Sasaki, from the beginning to the last, covered up the fascistic line of the DSP, assuming an air of being critic about the policy of the Liberal Democratic Party-Ohira government.

Sasaki took up three points at issue in the forthcoming House of Councillors election: (1) purification of political circles and establishment of political ethics, (2) defense of the people's living against the hike in prices and retrogressive policy in welfare, and (3) Japan's peace and security.

Commenting on the address by DSP Chairman Sasaki, the April 16 issue of AKAHATA says:

"Against the background of Sasaki's gesture of anti-LDP and dove policy, there lies an intention to deal smartly with the upper house election, which comes within two months. Recently, various arguments were raised by leaders in the business circles and LDP for revival of conscription and the legislation of a secret information protection act. These have aroused fears among the people. Sasaki took this circumstance into consideration: He counted that if the DSP openly follow a hawkish policy in the election campaign, it will have an adverse effect on the party, drawing the people's criticism to itself.

"At the same time, Sasaki omitted from his address such demands as rapid increase in military spendings, so that the joint electioneering with the Socialist and Komei parties will not be stemmed."

The DSP Congress heard reports on 1980 action program (draft) and policy platform.

CSO: 4120

.. 23

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

NEWSPAPER INTERVIEWS SAKATA ON NEW SECURITY PANEL

OW080947 Tokyo THE JAPAN TIMES in English 7 Apr 80 p 1 OW

[Article by reporter Y. Ikenagaga]

[Text] The inauguration last week of a House of Representatives special committee on security affairs has put an end to the decade-long argument over whether the Diet should have an ad hoc panel to discuss matters related to national security.

It marked "a step forward" toward building a national consensus on the biggest political question of how to assure Japan's defense and civilian control of the self-defense forces in the words of Michita Sakata, the 63-year-old chairman of the new committee.

Sakata acknowledges that the ruling and opposition parties are widely divided on the subject. Therefore, he hopes that the new committee will conduct "level-headed and realistic" discussions on security affairs to enable the nation to decide how to protect the peace and security of Japan in the 1980's.

In an interview with THE JAPAN TIMES, Sakata said that how to assure national security is the biggest political problem for any nation because it is closely related to national survival, national life and the fundamental rights of its people.

"And when a democracy maintains forces, it is the normal practice for its elected parliament to control and supervise the forces," observed Sakata, a liberal-democrat and one-time director general of the Defense Agency.

However, Japan lacked an effective tool of civilian control for years in the absence of a Diet committee to discuss security problems, mainly due to objections from leftist forces who doubted, the legitimacy of the SDF in the light of the war-renouncing constitution.

But growing public concern about national security has caused the opposition camp, except the Japan Communist Party, to reverse its stand and agree to the formation of the new committee, Sakata said.

24

The committee is expected to discuss matters related to the Japan-U.S. security treaty, the SDF and other security matters. But it will not debate any legislative bills.

Sakata anticipates some difficulty in managing the committee because the ruling and opposition parties widely differ in views on national security.

But he expects that the committee's debates will produce fruitful results because all the parties have contributed experts on security affairs to the 25-member committee. There is no need to worry about a difference of views among the members, he said.

"It is significant and meaningful to make clear through the committee debates which parties approve or disapprove of some issues and why they do so," Sakat said.

"For instance, some opposition members are opposed to the idea of allowing top-ranking officers of the SDF to take part in committee debates," he noted.

Asked to comment on the U.S. call for increased defense spending to boost Japan's defense capabilities, Sakata said that Japan should decide on its own what it can do to meet the expectations of its pacifically.

But he believes that the U.S. does not expect too much from Japan in view of Japan's constitutional limitations. "For instance, it is unlikely for the United States to call on Japan to cake over part of the mission of the U.S. Seventh Fleet (headquartered in Yokosuka, Japan)."

In his view, it is natural for the United States to ask Japan to make a due contribution to the bilateral security arrangements at a time when the Soviet Union is building up its forces, threatening to stand at parity with the United States.

To play its due role, Japan should prepare a new defense buildup program promptly and express frank views on U.S. efforts in the defense field, Sakata added.

He sounded critical of some Japanese business leaders who spoke in favor of reviving a conscription system and exporting weapons to foster an ord-nance industry.

He said that the business leaders should take a cool and more sensible attitude toward security problems.

COPYRIGHT: The Japan Times 1980

CSO: 4120

25

#### FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

TOKYO POPULATION DECREASES SLIGHTLY IN 1979

OW170451 Tokyo THE JAPAN TIMES in English 16 Apr 80 p 2

[Text] The population of Tokyo decreased last year for the first time in postwar history, according to a census released by the Tokyo metropolitan government Tuesday.

As of Jan. 1 this year Tokyo's population was 11,422,603, a decrease of 8,266 (0.07 percent) from the year before, Tokyo's residential basic register showed.

It was the first time since the metropolitan government began taking census in 1952 that the population of Tokyo had decreased from the previous year.

On the total population on Jan. 1 this year, 5,735,817 were males and 5,686,813 were females, the metropolitan government said.

An age breakdown showed that there were 2,436,045 persons aged 14 or younger, 8,115,403 aged between 15 and 64, and 871,163 older than 64.

Census takers noted that Tokyoites younger than 16 have been on the decrease since 1976 while those older than 64 have been increasing year by year over the past several years. The population of the elderly, which climbed by 4.2 percent above the figure last year, accounted for 7.63 percent of the total population this year.

The number of households in Tokyo totaled 4,354,433 on Jan. 1, 1980, representing an increase of 0.49 percent over the previous year's total statistically. The average Tokyo household consisted of 2.62 persons this year, compared with 2.64 persons last year, the metropolitan government reported.

Tokyo's population had continued to increase after World War II and topped 10 million in 1962 and 11 million in May 1967. But thereafter, the population increase tempo began slowing down with many people finding it difficult to buy residential land in Tokyo.

COPYRIGHT: The Japan Times 1980

CSO: 4120

FOR OFFICIAL USE ONLY

26

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

FORMER MINISTER CALLS FOR DEFENSE GOODS EXPORT STUDY

OW150530 Tokyo THE JAPAN TIMES in English 14 Apr 80 p 5

[Interview with former Japan Foreign Minister Kiichi Miyazawa by Yoshikazu Ishizuka and Masato Kawahira--place and date not given]

[Text] Ways to allow the export of Japanese-made defense-related equipment, if not weapons as such, to the United States or any other "allies sharing common values" should be explored in order for Japan to "assume her share of global responsibility," says former Foreign Minister Kiichi Miyazawa who attended the recent trilateral commission plenary meeting in London.

It is not reasonable, and Americans are surprised to hear of it, that Japan's "three principles" banning arms exports as a policy do not allow building aircraft carriers for the U.S., Japan's ally under the Japan-U.S. security treaty, while allowing the export to the Soviet Union of a large drydock that could be used to repair Soviet naval vessels, Miyazawa observed in a recent interview with THE JAPAN TIMES.

(The "three anti-arms export principles" originally applied to three areas: the communist countries, countries involved or expected to become involved in international conflicts and countries on which the United Nations imposed arms embargos. But the principles have come to be interpreted as banning all weapons exports to those areas and elsewhere in the world.)

"Here is a serious perception gap between the Americans and Japanese, and this is a more serious problem" in the current debate on the defense issue than the question of how to deal with the U.S. call for increased defense spending and a greater defense role on the part of Japan, he said. And, he said, the Japanese are primarily responsible for closing that perception gap.

Former U.S. undersecretary of state George Ball's recent proposal that Japan build two aircraft carriers and lease them free of charge to the U.S. so that they could be deployed to patrol the Pacific was received in Japan as an "unrealistic" proposal. But, as Miyazawa learned at the trilateral commission meeting, some Americans do consider Ball's proposal a serious and realistic proposition.

27

To open the way for the export of Japanese-made defense-related goods, if not weapons in a strict sense, to its allies, Miyazawa thinks that the U.S. Government's recent approach to defining its arms sales to China as "lethal" and "nonlethal" weapons may suggest a possible solution Japan can apply to its arms exports to the U.S.

Any attempt at a hasty solution in a black-and-white manner, however, should not be made, he cautioned. More time should be given to the process of consensus building, he said.

The Japanese are extremely sensitive to the defense problem and any rush for a solution or national consensus building would be only counterproductive, he said. People just began to think about Japan's defense problem in earnest, but they will have to go a long way before they will come to look at the issue as one of the security of their "communist of common value systems," the theme on which he expounded in his key-note speech at the trilateral commission meeting.

Joint Security

"They still do not fully understand that we have a joint security arrangement with the U.S., and not with the Soviet Union, because Japan and the U.S. share common values, and not merely because the Americans are strong, or we like the Americans, or we have large trade links," he said.

Calling the U.S.-Japan-Europe trilateral relations as an "alliance of common values" to defend freedom and democracy, Miyazawa stressed in his speech that Japan and Western European allies of the U.S. should share the responsibility for maintaining a stable political order and for undertaking sound management of the world economy as the U.S. no longer can carry the burden of responsibility alone as the leader of the Free World. (Excerpts of his speech appeared on the back page of THE JAPAN TIMES April 6 issue.)

His speech drew strong attention from the American and European trilateralists as what one participant called a very important statement on Japan's foreign policy for the 1980's and also a new departure for Japan.

Miyazawa admitted that the thrust of his speech was not far off the Japanese Government's stand though he did not consult Prime Minister Masayoshi Ohira in advance. It is no secret that Miyazawa, as a key member of the Ohira faction, has a great influence over Ohira's policy, particularly in international affairs.

During the interview, Miyazawa said that Japan has already been bearing the share it is supposed to take so as "not to increase the offensive power of the other side" (i.e., the Soviet Union and its camp), through such efforts as increased aid to Pakistan and supporting the boycott of the Moscow summer olympic games. Now Japan's efforts are expanding gradually in the direction of "increasing the defensive power of this side," though there is no national consensus yet by taking such steps as

28

establishing the Japan-U.S. defense cooperation subcommittee when he was foreign minister, and most recently, participating in multinational naval maneuvers in the Pacific, known as Rimpac 80, he observed.

In this vein, Miyazawa said, Japan should positively comply with the U.S. request that Japan speed up its five-year defense buildup program for 1980-84 by at least one year. Japan can also increase defense spending to help the U.S. maintain its forces here, without causing political controversy by attempting to revise the so-called status of forces agreement under the Japan-U.S. security treaty.

Lack of Consultations

Miyazawa, like many other trilateralists, has a critical view about the lack of U.S. consultations with Japan and European allies as much as his recognition of the need for American allies' sharing of the responsibility.

As an example, he pointed to President Jimmy Carter's failure to consult allies when he made a rather abrupt call on them to join in the U.S. boycott of the Moscow olymic games. "If he wants to take collective action, we must be consulted with well in advance to think it over," he said.

He also agreed with the interviewers who pointed to Carter's inconsistency in his policy toward Iran and elsewhere in foreign policy, as demonstrated in proposing economic sanctions first against Tehran, and then dropping them soon, both unilaterally.

"Since it is a demanding job to be the leader of such a big country, I can understand it is a considerably tall order for him to think and behave like the leader of the world's democracies. But we cannot take collective action unless he does so. He may be preoccupied too much with his re-election, too. This is the view shared by many of the trilateralists at the London meeting, including Americans," he said.

(To make the trilateral alliance work more effectively, he called for the institutionalization of consultation and coordination among the industrialized democracies, particularly over political and security-related issues.)

He also believes, as he stressed in his speech, that since the U.S. recognizes the need for sharing responsibility with its allies, the U.S. should acknowledge the "plurality of interests of its allies and accept its consequences."

Therefore, policies among allies today cannot be identical, he said, but diversified policies, based on each country's interests, toward Afghanistan, the Middle East, and so forth should be accepted as "international division of effort" among the Western democracies within a broad framework of loose coordination as long as they share their common values. West Germany may take care of Turkey, for example, Britain has the most experience in Afghanistan, and in this manner, let France deal with Mideast affairs if it wants, and the United States should accept them as a fact of life, he said.

COPYRIGHT: The Japan Times 1980

CSO: 4120

MILITARY

#### BRIEFS

CENTRALIZED COMMAND PLANNED -- The Defense Agency will establish in fiscal 1982 a central command designed to control and give centralized command to the three services of the Self-Defense Forces--ground, maritime and air-in times of emergency, a ranking agency official said Wednesday. Akira Shiota, chief of the director general's secretariat, told reporters that the central command plan was drawn up recently by a committee headed by Deputy Director General Akira Watari, and was approved by Director General Kichizo Hosoda. The construction work on the central command building will be started in fiscal 1981 and completed in fiscal 1982 for inauguration by the end of that fiscal year. Shiota said. Total costs are estimated at about 6 billion yen. The central command will be built on the grounds of the Defense Agency in Roppongi, Tokyo. The building will be two stories, with three basement floors. The SDF has been criticized for the lack of the centralized command. The air, ground and maritime SDFs have separate command systems. [Text] [OW110537 Tokyo THE JAPAN TIMES in English 10 Apr 80 p 4 OW]

CSO: 4120

30

FOR OFFICIAL USE ONLY

ECONOMIC

BANKS FORECAST SHARP RISE IN INDUSTRIAL INVESTMENTS

OW101036 Tokyo MAINICHI DAILY NEWS in English 9 Apr 80 p 5 OW

[Text] The nation's two long-term credit banks have projected another sharp rise in industrial investments in fiscal 1980 following the one in the previous fiscal year.

The Industrial Bank of Japan, Ltd., forecasts corporate investments will advance 14.1 percent in fiscal 1980 (April 1980-March 1981), compared with an estimated 16.5 percent increase for fiscal 1979. The figures represent increases over a year-before level.

The long-term credit Bank of Japan, Ltd., projects a 15.6 percent gain for fiscal 1980 against an estimated 13 percent increase in fiscal 1979.

Investments by manufacturing firms will grow at a slower pace at 5.9 percent in fiscal 1980 from the estimated 26.4 percent in fiscal 1979. But investments in the nonmanufacturing sector will move up 18.2 percent in fiscal 1980 against an estimated 12.1 percent in fiscal 1979, according to the Industrial Bank of Japan.

The long term credit Bank of Japan envisages an 8.7 percent gain for the manufacturing sector in fiscal 1980 compared with an estimated 21 percent in the previous fiscal year.

Nonmanufacturers will increase investments by 19.5 percent in fiscal 1980 against an estimated 9 percent in the previous fiscal year, according to the long-term credit bank.

The Industrial Bank worked out its projection based on a survey of 1,765 firms as of early March, while the long-term credit bank surveyed 1,115 firms in late February.

The two banks point out such unfavorable factors for investments as a deterioration in corporate profits due to soaring oil prices, tightening money policy and an uncertain outlook for the world economy.

The long-term credit bank says that industrial investments may slow down toward the latter half of fiscal 1980 because of possible downward revision in investments by electric power companies.

COPYRIGHT: Mainichi Daily News 1980

CSO: 4120

31

**ECONOMIC** 

'JAPAN TIMES': MITI, KEIDANREN AGREE ON FOREIGN COAL INVESTMENT

OWO81033 Tokyo THE JAPAN TIMES in English 7 Apr 80 p 5 OW

[Text] The Federation of Economic Organizations (Keidanren) and the Ministry of International Trade and Industry (MITI) have agreed that efforts should be made to fill 50 percent of the nation's steam coal needs in 1990 by stepping up investments in coal mine development projects in Australia, North America and China.

Keidanren, Japan's foremost business organization, and the ministry have reached this agreement as a result of their joint studies on ways to secure stable supplies of steam coal in the coming decade.

The studies have been carried out on the basis of a MITI estimate that Japan's imports of steam coal in 1990 will total 53.5 million tons, 53 times as much as the present level.

MITI believes it will become necessary for Japan to import much more steam coal in 10 years' time because the electric power companies are now required to burn coal instead of oil in power generation, mainly because of soaring oil prices.

Other industries, such as cement and paper manufacturers, are also being forced to use coal as a main energy source. It has thus become a question of life or death for Japanese industries whether Japan can dramatically increase steam coal imports in the coming decade.

The agreement just reached between Keidanren and MITI calls for, among other things, redoubled efforts to promote Japanese investments in overseas coal mine development projects, particularly those in Australia, North America (mainly Canada) and China.

The agreement also calls for Japanese interests to conclude as many longterm steam coal import contracts as possible in the coming decade.

The agreement envisages imports of 12 to 16 million tons from Australia in 1990, 6 to 7 million tons from China, 8 million tons from North America and 8 million tons from the Republic of South Africa and other nations.

32

# APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

FOR OFFICIAL USE ONLY

The long-term steam coal import policy will be explained to Australia by Keidanren President Toshiwo Doko when he visits that country in mid-April. Yoshitake Sasaki, minister of international trade and industry, will present the policy to Chinese Government leaders when he visits Beijing late in April.

COPYRIGHT: The Japan Times 1980

CSO: 4120

33

**ECONOMIC** 

JAPANESE SCRAMBLING FOR COAL DEVELOPMENT, IMPORT ACTION

Tokyo NIKKEI SANGYO SHIMBUN in Japanese 4 Mar 80 p 1

[Text] With another "coal age" imminent, Japanese firms are scrambling into development and importation of foreign coal. Although these firms are spear-headed by Mitsui & Co. and Mitsui Mining Co. of the Mitsui group and Mitsubishi Corporation and Mitsubishi Mining & Cement Co. of the Mitsubishi group, Marubeni, Nissho Iwai, Taiheiyo Kohatsu, and Matsushima Kohatsu are other companies also getting into the act. On the demand side of things, the Electric Power Development Corporation (Terusumi Yohiko, President) leads the electric power industry in the search for mining rights. Sumitomo Metal Industries from the steel industry and Ube Industries of the cement industry have also jumped to acquire concessions. Lead by Shukko Kosan, the oil companies are also making inquiries. However, the fact of the matter is that the major oil companies such as Exxon, Shell, and British Petroleum have already used their financial muscle to monopolize the major coal concessions and there is little room for Japanese firms to expand into this

"In the future, those who control coal will control international business" are the recent words of a coal expert in a major corporation. For example, the development cost of a strip mine in Australia producing 3 million tons of coal yearly for electrical power generation purposes would be about \$200 million. Included in that figure are the costs of constructing new towns and railroads. If you consider three such mines of 3 million-ton capacity each, yearly production would be 10 million tons, which would require construction of a new seaport. When you add another \$100 million for the new port, the total investment figure comes to \$600-700 million.

Furthermore, to transport those 10 million tons some 215 to 230 50,000-ton coal-carrying ships are required. At 10 billion yen per new ship, that amounts to 250 billion yen for new vessels. Several billion yen would be necessary to construct facilities for a "coal center" for unloading the coal in Japan. If on top of that you add construction of four or more 1 million kW coal-powered electric generating plants, the grand total construction expenses are a whopping 900 billion to 1 trillion yen.

34

If a company can secure a major right in either coal mine development, transportation, or usage--prosperity is a cinch. In the past that has been the case with oil. However, the major oil companies control all concessions, and of course now the oil producing countries reign supreme. All of these scenes remain to be played in the market for coal.

In addition to being a new market, the brokerage for firms handling coal transactions is 100-150 yen a ton. An import business of 10 million tons a year would earn a commission of 1-1.5 billion yen. Japan now imports about 1 million tons of foreign coal yearly, but demand is expected to grow rapidly hereafter to 22 million tons by 1985, to 53.5 million tons by 1990, and 85 million tons by 1995. One business official has lamented, "If we do not acquire rights now the damage will be irreparable."

Among Japanese companies, the Mitsui and Mitsubishi groups are dead set on acquiring mining concessions, and they are outdistancing the other firms. The Mitsui group is involved in eight mines, with total recoverable reserves of approximately 1.35 billion tons of which Mitsui has rights to around 200 million tons. Excluding Mitsubishi Chemical Industries, the Mitsubishi group is involved in nine mines, and they have concessions of 140 million tons of 900 million tons total. If you compare this to Japan's total recoverable coal deposits of 1 billion tons, these are eye-opening amounts. Of course Mitsui and Mitsubishi both have ongoing programs of importing foreign coal for use in their steel companies, and they are faced with the problem of maintaining them.

On the other hand, companies other than Mitsui and Mitsubishi such as Marubeni and C. Itoh & Co. have also had opportunities to obtain concessions. In February Marubeni was able at one stroke to acquire 14.99 percent of the stock of the Forestwood Company, which owns the Mosuueruburukku mine and 25 percent of the Silver Valley mine, both in Australia. This was a major breakthrough for Marubeni's cement operations, and they are now looking at coal for electric power generation.

Although C. Itoh & Co. does not possess any mining concessions as such, it is closing in on acquiring import rights from coal mining companies in South Africa and Australia. Nissho-Iwai and Ube Industries have joined together to obtain coal for their cement operations. From the coal industry, Shukko Kosan, which has been frightened by falling sales of the C. Heavy Oil Company, is competing with the big trading companies in purchasing and importing coal.

Despite all this, however, the major coal companies such as Exxon, Shell, and British Petroleum (BP) moved as early as 1977-78 to acquire mining rights in New South Wales and Queensland in Australia and Alberta in Canada. The electricity industry estimates that "the major oil companies are behind an eightfold increase in Australian coal exports during fiscal year 1980."

The Mitsui group's total overseas mining concessions is around 200 million tons. By contrast, Shell has 140 million tons in Australia alone, and BP

35

# APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

## FOR OFFICIAL USE ONLY

has over 300 million tons. Moreover, in contrast to Mitsui, Mitsubishi and other Japanese firms whose rights are 25 percent at most and who in most cases are only small minority stockholders, the major oil companies often enjoy rights over 30 percent. Accordingly, the majors have considerable influence on production, pricing, and other decisions.

In light of this scene of Japanese firms fighting among themselves for their shares and the supremacy of the majors, coal prices have jumped sharply from October of last year. Leaders of the Japan electric power industry, who are faced with the certainty of becoming the world's largest users of imported coal, are worried that "coal may take the same route as oil."

36

# MAJOR JAPANESE COAL MINING INVESTMENTS OVERSEAS

	'	•		
	D RESERVES TON UNITS)	(480) (1,067) (4,400) (3,544) (5,063) (2,453) (1,272) (1,513)	(19,792)	(2,205) (4,165) (960) (960) (958) (4,632) (891) (254)
	TOTAL DEDEACRODED RESERVES (10,000 VETRIC TON UNITS)	9,600 AB 5,336 AB 22,000 A 56,700 B 22,500 A 10,900 A 5,086 A 3,088 AB	135,210	14,700 AB 8,500 AB 8,000 A 7,980 A 38,600 A 7,425 A 7,425 A T,425 A T,425 A T,425 A
New South Wales, Australia Queensland, Australia Eritish Columbia, Ganada Fuel grade coal General-use coal	NAVE OF LINE	Doreiton (N) Nora (Q) Nebo (Q) Mirumeran (Q) Kuintetto (BC) Sakuson (BC) Kosumaa Muiraa (BC) Rain Kuriiku (BC)	TOTAL	Waakuwaasu (N) Yuuran (N) Saraji (Q) Guuniera (Q) Piiku Daunzu (Q) Nooichi Paaku (Q) Ookurando (N) Doomia (Q) Hosumaa Wuiraa (BC)
<pre>M = New South Wales, Q = Queensland, Aust BC = Eritish Columbia A = Fuel grade coal B = General-use coal AB = Eoth fuel and ge</pre>	COLPANY NAVE	COFFAIT NAFE MITSUI GROUP Witsui & Co., Ltd., Mitsui Mining Co., Ltd.)		MISUBISHI GROUP (Mitsubishi Corporation, Mitsubishi Mining and Cement Co., Ltd.)

Ξ

SUBTOTAL

3.85 0.8 2.4 14.1	19 (15) 17•3	67	4. 3.85 25. 14.99	4444444 6 4444444 0
(266)	(5,130) (3,000) (8,130)	(6,370)	(600) (223) 43 (4,000) (750) (5,616)	572 (75) (48) (440) 616 (1,760) (210)
5,800 (B) 5,400 (A) 11,200 101,491	27,000 B 20,000 B 47,000	13,000 B	15,000 A 5,800 E 5,400 A 16,000 B 5,000 B	13,000 A 1,700 A 1,100 A 10,000 B 14,000 B 40,000 AB 15,000 A
Guroosu Saree (N) Jaaman Kuriiku (3) SUETOTAI MITSUEISHI GROUP TOTAL	Eurea Sooru (2) Maunto Aasaa (N) TOTAL	Baan Rokku (N)	Heiru Kuriiku (2) Guroosu Faree (N) Jaaman Kuriiku (2) Shiruba Baree (N) Mosuueruburukku (N)	Rideru (N) Uesto Warusendo (N) Abushii (N) Cheen Baree (N) Wararaa (N) Hantaa Baree (N) Baagoo (N)
(Mitsubishi Chemical Industries, Ltd.)	ELECTRIC POWER DEVELOPMENT CO., LTD.	TAIHEIYO KOHATSU	MARUBENI	UBE INDUSTRIES, LID NISSHO IWAI

35 (12.5)	(12.5)	250 20 20 20 40 90 40
(6,720)		(1,560) (1,000) (300) (2,860)
19,200 A		10,400 B 5,000 E 15,000 A TOTAL 30,400
Maunto Supliken (EC) Shugaaroofu (N)	Same	
NICHIMEN CO., LID.	MATSUSHIMA KOHATSU	SULTION: OCROUP Risha, Ltd., Woorawangu (N) (Sumitomo Shoji Kaisha, Ltd., Woorawangu (N) Sumitomo Coal Mining Co., Heiru Kuriiku (2) Ltd., Sumitomo Metal Industries, Ltd.)

Among the mines in which the Mitsui, Mitsubishi, and Sumitomo Groups have concessions, some represent participation by a single company from within those groups. NOTE:

The figures in parenthesis under the underground reserves column are the calculated Japanese concession amounts. ຮໍ

The figures in parenthesis under the concession percentage column are projected percentages. ů

Mines for which concessions are held also include indirect financing by subsidiary companies and corporate finance companies. 4.

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

9180 CSO:

4105

COPYRIGHT: Nihon Keizai Shimbunsha 1980

ECONOMIC

1

EFFORTS TO TRIM OIL IMPORTS FAIL

OW160102 Tokyo THE JAPAN TIMES in English 15 Apr 80 p 10

[Text] Japan failed to live up to its international commitment to trim its oil imports for the 1979 calendar year to less than 5.4 million barrels per day, it was learned Monday.

Highly placed Ministry of International Trade and Industry (MITI) sources admitted that Japan's combined imports of crude oil and petroleum products for 1979 had surpassed the 5.4 million barrel-per-day target, agreed upon at the economic summit meeting of industrial nations held in Tokyo in June 1979 by about 100,000 barrels.

As a reason for the overrun, the MITI sources cited the fact that the Tokyo summit agreement had come in the midst of the year, thus the statistical figures available at that time for estimation were rather inaccurate. The Japanese Government makes it a rule to work out its official projection for the yearly oil supply program in April on a calendar year basis, they added.

And Japan's oil imports during the first quarter of the 1979 calendar year, that is the final quarter of fiscal 1978 (January-March of last year) turned out to be "so large as to nullify the efforts throughout the latter half of 1979 to limit the total volume of oil imports," the sources said.

The sources expressed the hope that other summit nations would understand the circumstances that led to Japan's inadvertent breach of its international commitment.

They also said that Japan's oil imports for 1980 would be held to the level of 5.4 million barrels per day without fail to keep the Tokyo summit agreement.

COPYRIGHT: The Japan Times 1980

CSO: 4120

40

# APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200080003-8

## FOR OFFICIAL USE ONLY

ECONOMIC

STEEL FIRMS AGREE TO HALT NEW IRAN CONTRACTS

OW160100 Tokyo THE JAPAN TIMES in English 15 Apr 80 p 10

[Text] The Japanese steel industry has decided to refrain from concluding new steel export contracts with Iran to keep step with U.S. economic sanctions against Iran, industry sources said Monday.

The sources said that the Japanese steel makers had been urged by the Ministry of International Trade and Industry to "give cautious consideration" to their steel exports to Iran in view of the recent U.S. decision to sever diplomatic relations with Iran.

It was the Japanese industry's first positive response to the U.S. call on its allies to join in economic sanctions against Iran in retaliation for the prolonged holding of the American diplomats as hostages.

According to the sources, the Japanese steelmakers will implement exports contracts already concluded for the January-June period, but will refrain from concluding new ones for July and thereafter.

A total of 650,000 tons of steel products is to be exported to Iran in the first half of this year under the contracts already concluded.

Japan's rolled steel exports to Iran have been decreasing after reaching a peak of 2,110,000 tons in 1975.

Last year's exports declined to 600,000 tons mainly due to the political and economic instability in that country.

COPYRIGHT: The Japan Times 1980

CSO: 4120

41

**ECONOMIC** 

### BRIEFS

NEW ZEALAND TRADE MISSION--A trade mission, composed of exporters from the Otago Province of New Zealand, is visiting Japan during the period March 14-28. The mission is being sponsored by the Japan/New Zealand Businessmen's Council and the New Zealand Export Institute. The Japan Chamber of Commerce and Industry is the official host to the mission while it is in Japan. The mission involves 16 members from 12 companies and is headed by Robert Wilson, vice president of Wilson Neill Limited. Products exported by the companies composing the mission cover a large range. One focus is foodstuff products, with a wide range of marine foods, fruits, vegetables and processed foods being offered. In the textile area, makers of down, knitwear and sheepskin garments are represented. Other products include hand-made furniture, fur skins, wooden toys, jewelry and tableware. Travel, shipping and tourist interests are also represented. [OW171517 Tokyo MAINICHI DAILY NEWS in English 15 Mar 80 p 5 OW]

TREASURY BILLS PURCHASES DISCOURAGED -- The Financy Ministry and the Bank of Japan have urged Japanese securities. Life and property insurance companies to slow down their purchases of U.S. treasury bills (TBS). Securities executives said Thursday. The executives said the ministry and the central bank made the call since they believed that continued active buying of TBS by Japanese institutional investors was responsible to some degree for the recent sharp depreciation of the yen against the U.S. dollar. According to the executives. The ministry and the Bank of Japan began making such a request late last year in an effort to stop the yen from falling further. Both the ministry and the central bank declined to comment on the matter. However, the securities executive said the ministry and the central bank were considering tightening controls on such investments by. For example, setting a ceiling on the purchase of TBS by Japanese institutional investors. There are three types of TB: Once-year, half-a-year and three-month. Life and non-life insurance companies have tended to invest chiefly in one-year TBS. And renewed their purchases yearly for long-term investments. With U.S. interest rates shooting up and with the U.S. dollar continuing to strengthen against the yen for some time. TBS have been a very attractive investment for Japanese interests. According to the executives. [Text] [OW050914 Tokyo THE JAPAN TIMES in English 4 Apr 80 p 5 OW]

CSO: 4120 42

SCIENCE AND TECHNOLOGY

LASER INDUCED HIGH TEMPERATURE CHEMICAL PROCESS DEVELOPED

Tokyo NIHON KOGYO SHIMBUN in Japanese 8 Mar 80 p 8

[Text] Osaka Government Industries Research Institute of the Agency of Industrial Science and Technology (director, Kazuo Naito) has developed a new high temperature thermo-chemical process which uses a laser to induce dielectric destruction of gases.

When pulse beams from a laser are exposed to gases close to normal pressure, an intense flash is created at the focal point and plasma is explosively produced. This is laser dialectric destruction, which has come to be highly regarded recently in the field of physics. The result obtained at this time opens new fields for use, and it is expected to draw close attention because of its efficiency in acetylating methane, recovering hydrogen from hydrogen sulfide and recovering carbon monoxide from carbon dioxide inexhaustibly present in the atmosphere.

For the time being, the most advanced research for the practicalization of the plasma reaction process probes the plasma jet process which uses plasma made from an inert gas such as argon by an electric discharge as a heat source for the reaction. However, due to the problems related to the heat resistance of the reactors, the apparatus will be considerably complex. In contrast, the new process which utilizes dielectric destruction only requires a very simple apparatus as shown in the drawing. It is designed to induce high temperature thermal decomposition by the plasma created from the dielectric destruction induced by converging pulse beams of carbon dioxide laser reflected by a concave lens, on a raw material gas.

The experiment was conducted at a low photo energy of 3.3 joules per pulse using a carbon dioxide laser called, a "TEA laser," and it is reported that, in acetylation of methane, practically all of it was converted to acetylene within some tens of seconds only leaving insignificant amounts of byproducts but hydrogen adhered on the reactor walls.

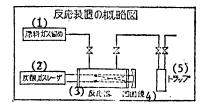
The acetylation of the methane obtained from natural gas and fermentation is considered one of the future directions. However, the conventional partial combusion process and flame process not only wastes a great deal of fuel but

43

is also undesirable due to disadvantages such as a low yield and a complex process required for the separation of the byproducts. Weighing these points, the institute assesses the new process to be to far more beneficial. When testing to acetylate saturated hydrocarbons up to 6 carbons besides the methane, it is said that the samples were efficiently acetylated just as methane.

On the other hand, the following results were reported in regard to the decomposition of hydrogen sulfide and carbon dioxide: (1) By irradiation at the 80 pulse level, approximately 80 percent of the hydrogen sulfide was decomposed to hydrogen and sulfur, and the sulfur content deposited on the reactor walls. (2) The carbon dioxide was decomposed to carbon monoxide and oxygen, and the reaction equilibrated at a 62 percent decomposition.

Hydrogen sulfide is grossly generated from the desulfurization process in oil refining. Only the part of sulfur is, for the time being, utilized after the hydrogen sulfide is treated with a partial oxidation. Hydrogen recovery yet remains to be seen. The new process is sure to attract attention even from this point.



Outline of Apparatus for Reaction

Key: 1. raw material gas reservoir

- 2. carbon dioxide laser
- 3. reactor
- 4. concave lens
- 5. trap

COPYRIGHT: Nihon Kogyo Shimbunsha Tokyo Honsha 1980

8940

CSO: 4105

44

SCIENCE AND TECHNOLOGY

ZONE HEATING DOUBLES STRENGTH OF SYNTHETIC FIBER

Tokyo NIKKAN KOGYO SHIMBUN in Japanese 18 Feb 80 p 3

[Text] A new technique for strengthening nylon, polyethylene and other synthetic fibers, a technique that makes them stronger than stainless steel, has been developed. This is the "zone annealing" (heat processing) method developed by Assistant Professor Kikuo Isato of Yamanashi University. It is an unique process whereby more heating of synthetic fiber while pulling it recrystallizes the fiber's molecules which results in a fiber that has twice the strength of traditional high tensile strength, super-tough fibers. The fiber industry has been using such new technics as highpressure extrusion plastic process and high speed spinning in an effort to develop strong fibers but this new technique will bring about great advancement in this field. It has already received much attention both domestically and around the world. Moreover, this technique can be used to strengthen plastic film as well. An experiment using polyethylene (polyethylene phthalate--PET) verified that the film's strength can be increased four-fold and the repercussions are being felt in the plastics industry, too.

"Development of strong fiber" has become a major research goal of synthetic fiber manufacturers. "Thinner than a spider's web and yet stronger than steel" was the by-word for nylon (developed by Dupont, U.S.A.) which made its appearance in 1935. Nylon's "strength," heretofore lacking in natural fibers, launched a synthetic fiber boom. As a result of creation of strong fiber, durable clothing and light yet strong ropes appeared. Moreover, this new material was used in other nonfiber fields as well--for example, as tire cords--and it opened up new fiber markets. Now, it is regarded as the material which holds the key to the manufacture of lighter and fuel/cost efficient cars. Along with easy to dye and nonfrictional fibers, it is one of the major research topics currently being pursued.

There are two main approaches to the development of strong fiber. One is the creation of a new material (polymer) such as Dupont Company's nylon or Kevlar (superstrong fiber).

45

Generally speaking fiber consists first of all of microfibrils or macrofibrils—alternate links between plate-like crystallization areas (lamella) made up of polymer chains folded at 10 nano-millimeter intervals and noncrystalline areas. Lamella and fibrils are connected by a conjunctive (or tie) molecule.

This conjunctive molecule and the noncrystalline part are the origins of tensile strength but due to the fact that it is bent and so on, this conjunctive molecule is merely performing a small percentage of its potential work load. As a result, the fiber has only 1/5 to 1/100 of the "ideal strength." To increase the effectiveness of the conjunctive molecule (stretched out conjunctive molecule) and/or to create a fiber with increased crystallization potential are becoming industry-wide objectives.

Development of a stronger fiber through new materials development in effect means discovering a substance that has fewer conjunctive molecules and non-crystalline components (which are said to affect the strength). That is to say, polymer chains must be converted into a wire sheaf and weak conjunctive links eliminated. This was the intent of the development of polymers such as amido— and poly—amido—hydrazide, polyallylate, polyazomethane; and they are used as base materials for new fibers.

The other approach is to create a strong fiber by utilizing the special properties of multipurpose polymer. It is an attempt to modify fiber's weakness—the conjunctive molecule and noncrystalline segments—and to increase its strength by broadening the joints and so on. In this way the fiber is brought up to the ideal strength. This method is represented by attempts to reinforce such multiuse base materials as Nylon—6, PET, polypropyrene and polyacetyl and so on by using the high pressure extrusion method, high speed spinning and flash spinning techniques. Several different kinds of technical developments are in progress in this field.

There is, however, a limit—both commercial and manufacturing—to the former approach to the production of strong fiber. The reason for this is that in new materials development, one must consider the cost of the raw material, the fact that it would be difficult to assign epoch—making characteristics to it, the fact that it would not be easy to secure new demand for the new product and so forth. In the past there has only been few instances where innovative materials were successfully launched into manufacturing and commercialization.

On the other hand, the latter approach—modifying and improving fiber's strength—is hampered by technical limitations. For instance, in flash spinning, short fibers alone are produced. In high-speed spinning, because the material is cooled rapidly, crystallization is low and it is difficult to obtain a fiber of unusual strength.

The method developed by Professor Isato is a technique for increasing the strength of Nylon-6 and PET. The method consists of eliminating, from molecules comprising the fiber, noncrystalline or ineffective (nonfunctioning)

46

conjunctive molecules which weaken the fiber's strength. The result is the transformation of fiber into a strong fiber. That is to say, it is a technique which fully utilizes the conjunctive polymer molecules whose effectiveness have been held down to a small percentage of their potential. It is claimed that this method enables strengthening of fiber to the ideal strength level.

In concrete terms, two techniques are used to manufacture strong fiber. The first step is to stretch raw fiber--obtained by liquification spinning Nylon-6, PET and so on--(low crystallization fiber) after adding tensile strength (zone stretching), thereby making polymer chains uniform. In other words, fiber molecules are given polymer orientation and they are stretched out to their maximum capacity.

Next, while pulling the fiber in this state with high tensile strength (16 kilogram per 1 square millimeter elasticity) zone heating (200-210°C) is administered so as to prevent lamella crystal formation; and the fiber is induced to recrystallize (stretched-out crystal formation).

A narrow width, movable heater is used to melt a portion of fiber--zone heating--therefore, there is no need to melt down the entire base fiber as in the traditional reinforcement technique. As a result, it is an energy efficient method of reinforcing raw fiber.

Results of three or more zone heating experiments yielded the following strength data: In the case of Nylon-6, the Young's modulus was 11.1 giga-pascal; PET registered 19.4 giga-pascal and polyethylene, 36.2 giga-pascal. These values far surpassed the commercially available super-touch fibers' range of 2.75-5 giga-pascal and the strength demonstrated was equivalent to that of stainless steel.

Professor Isato has applied this method to PET and other polymer film manufacture and has succeeded in obtaining super-touch single axis orientation films

In the PET experiment, the Young's modulus was 15.6 giga-pascal or four times stronger than a commercially available film. He also verified that 4.3 giga-pascal film can be obtained with Nylon-6 and 10.1 giga-pascal film can be made from Isotactic polypropyrene.

47

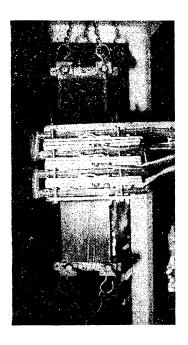


PHOTO CAPTION:
Zone heating experiment with film (The center portion is the mobile heating unit. As it moves upward, strong film is produced below.)

# Instance of Zone Heating Fiber

Test Material	Crysta' Elasticity Modulus (dyne/cm <sup>2</sup> )	Yount's Modulus (dyne/cm <sup>2</sup> )
Polyethylene Telephthalate	108 x 10 <sup>10</sup>	19.4 x 10 <sup>10</sup>
Nylon-6	$165 \times 10^{10}$	$8.3 \times 10^{10}$
Isotactic Polypropyrene	$34 \times 10^{10}$	$21.7 \times 10^{10}$
Polyethylene	$235 \times 10^{10}$	$36.2 \times 10^{10}$
Results of	Using Zone Heating on Films	
Polyethylene Telephthalate	108 x 10 <sup>10</sup>	$15.6 \times 10^{10}$
Nylon-6	$165 \times 10^{10}$	$4.3 \times 10^{10}$
Isotactic Polypropyrene	$34 \times 10^{10}$	$10.1 \times 10^{10}$

As a result, thinner, lighter film can be manufactured and it will have the following advantages: (1) It would be possible to make a film with less material. (2) In agricultural-use films, the degree of transparency will be improved. (3) When used in packaging, less will be needed and it will be lighter. (4) It can be used as substitute for tire cord.

Professor Isato states that, "this method will enable production of a measured-to-exact-order product that does not stretch nor shrink; and there is the added advantage that the strong fibers and films thus manufactured can be marketed through the existing marketing channels." It is regarded with interest

as an input that would raise the existing technological level.

COPYRIGHT: Nikkan Kogyo Shimbunsha 1980 11460 CSO: 4105