

FOR OFFICIAL USE ONLY

JPRS L/10251

13 January 1982

Japan Report

(FOUO 2/82)

FBIS FOREIGN BROADCAST INFORMATION SERVICE

FOR OFFICIAL USE ONLY

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.

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

FOR OFFICIAL USE ONLY

JPRS L/10251

13 January 1982

JAPAN REPORT

(FOUO 2/82)

CONTENTS

MILITARY

- LDP Link With Military Buildup Policy Reviewed
(Hideo Ohtake; ASAHI JANARU, 6, 13, 20 Nov 81)..... 1

ECONOMIC

- Mitsubishi Broadens Scope of Deals With China
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 24

- MITI Called on To Consolidate View on Materials Sector
(Haruo Suzuki Interview; JAPAN ECONOMIC JOURNAL, 15 Dec 81). 25

- Honda, Yugoslav Firm To Construct Engine-Making Plant
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 27

SCIENCE AND TECHNOLOGY

- Technical Cooperation Among Japan, U.S., Europe
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 28

- Companies Pin Hopes on New Products, Technology
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 30

- JIRA Asked To Participate in USSR Robot Show
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 31

- Nuclear Powerplant Construction Revives
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 32

- Two Underwater Steel-Cutting Technologies
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 33

- Japan Still Imports More Technology Than It Exports
(JAPAN ECONOMIC JOURNAL, 15 Dec 81)..... 34

- a -

[III - ASIA - 111 FOUO]

FOR OFFICIAL USE ONLY

Small Metal Particles Used for Production of Carbon Fiber (JAPAN ECONOMIC JOURNAL, 15 Dec 81).....	35
Briefs	
Australian Uranium Enrichment	36
Automated Car Painting	36
Machine Tool Orders Down	37
Semi-Finished IC Chip Exports	37
Carbon Fiber Plant	37

- b -

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

MILITARY

LDP LINK WITH MILITARY BUILDUP POLICY REVIEWED

Tokyo ASAHI JANARU in Japanese 6, 13, 20 Nov 81

[Articles by Hideo Ohtake: "From Detente to Military Buildup"]

[6 Nov 81 pp 30-34]

[Text] [No 14] Fukuda Government and Military Expansion Plan

The Liberal Democratic Party (LDP) suffered a disastrous defeat in the 5 December 1976 general elections, about a month after the "General Principles of the Defense Plan" were decided. Prime Minister Miki took the responsibility and resigned, and was replaced by Takeo Fukuda as prime minister. Many members of the Fukuda faction were critical of the decision on the "General Principles," as was the Seirankai (Blue Storm Society), which had provided active support to the establishment of the Fukuda government. Also, the new cabinet was less than enthusiastic in faithfully upholding the "General Principles" and the policy of "keeping under 1 percent of the GNP," because it was not directly responsible for the decision on the "General Principles." It is therefore not surprising that the disengagement from the Miki-Sakata line of detente began with the change of government.

However, the Fukuda cabinet did not rush precipitately toward military expansion and militarization soon after acquiring political power. The reason was that there were several constraints which prevented a sudden change in policy.

First, the LDP defeat which resulted in Miki's resignation (and the subsequent inauguration of the Fukuda cabinet) brought a balance of power between conservatives and reformists in the Lower and Upper Houses. The LDP barely maintained a majority with the late addition of unaffiliated winners, and the party candidate for prime minister was appointed by a bare majority of one vote. As a result, the Fukuda cabinet had to be extremely careful not to irritate the opposition parties by disengaging itself from detente, and it also could not neglect its guard against moves by the Miki faction, which sought to merge forces with the opposition. This was probably why Mihara, a veteran of Diet policy affairs, was selected as director of the Defense Agency.

Second, the Japanese economy faced a grave crisis in 1977 and 1978. The policy of restraining overall demand to stabilize "runaway commodity prices" following the first oil shock had resulted in the beginning of a serious recession. Moreover,

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

conditions had failed to improve despite the government's switch to business stimulating measures beginning in 1975, and mass bankruptcies and an employment crisis loomed. The new prime minister, who had prided himself on being "Fukuda, the economic expert," personally sought to improve conditions and was completely bound up with economic problems in the early stage of his administration. Also, on the international front, demands made on Japan regarding such economic policies as the "three engine theory" took center stage and, together with the detente diplomacy of the early Carter period, resulted in the defense problem being placed on the back burner. Consequently, there was no room or necessity for the prime minister and his aides to take strong leadership on the defense question.

Thirdly, the signing of the Japan-China peace and friendship pact was the prime foreign policy project at the time, with Chief Cabinet Secretary Sonoda (foreign minister since late 1977) taking the initiative. Sonoda was trying hard to avoid the inference that Japan-China relations would signify an encirclement of the Soviet Union, and he was therefore impelled to adopt a cautious stance to avoid irritating the Soviet Union with a buildup of defense power. Additionally, Sonoda who wielded real power with the Fukuda cabinet adopted a dovish posture on foreign policy and defense problems in general. As a result, his presence could be seen as having played a certain restraining role on militarization. Especially since 1978, Sonoda was considered to have a braking influence on the Ministry of Foreign Affairs, which was run by anti-Soviet hardliners of the Shinsaku Hogen school.

Fourth, Sonoda had advocated "a test as a peace-loving nation" in the face of foreign criticism of Japanese militarism in the early 1970's, and apparently needed some time to convert to an "inherent" hawkish stance, even with the nudging of hawkish elements in his faction. For example, when Sonoda visited the ASEAN countries in August 1977, he announced the Manila Declaration (Fukuda Doctrine) based on the following: "Looking back on history, economic powers have always been military powers at the same time. However, our nation upholds the unprecedented ideal in world history of trusting in the justice and faith of the peoples of the world and of striving to maintain their security and existence with the decision not to take the path of a military power. This is our challenge to a test unprecedented in history. I believe that this option by Japan will contribute to the fundamental benefit of not only the entire Asian region, but also to that of the entire world." This statement represents Fukuda's pet theory, and it was not at all surprising to find it inserted in the communique. However, as we will explain later, when one considers that by that time the Soviet threat was already beginning to be pointed out inside the Foreign Ministry and the Defense Agency, the fact that the communique was issued has a significance which cannot be overlooked.

With this as a background, Fukuda continued the basic Miki-Sakata line for some time. This posture is best revealed in the Fukuda cabinet's position vis-a-vis the question of U.S. troop withdrawal from South Korea. Prime Minister Fukuda's aides reportedly submitted a written opinion to the prime minister as follows: "If Japan talks too much about the withdrawal of U.S. forces from South Korea, the United States might urge Japan to adopt 'an equal share of defense costs' and to 'increase aid to South Korea.' To avoid this, we would advise prudence in making statements on the subject." Fukuda apparently took the advice and refrained from presenting any strong request to the United States concerning U.S. troop withdrawal. Assuming that Fukuda had

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

already entertained strong doubts about any Soviet military buildup, he was not prepared to assume any additional burden in defense spending. Nor was he prepared to arouse popular domestic opinion for the strengthening of defense power to offset the withdrawal of U.S. forces.

It is readily understandable from these circumstances that there were serious constraints which prevented Fukuda from taking the initiative in a turnabout from detente. In fact, it was the Defense Agency--especially the uniformed officials--who led the criticism against detente during this period. Their activity gradually but surely gained results throughout 1977.

1 Percent of GNP Ceiling Is Initial Target

On 14 January 1977, an unofficial announcement was made regarding the Finance Ministry's budget draft, which was delayed by the general elections. In the FY-77 budget, the defense budget was increased by 11.8 percent compared to the previous year, while its ratio of the GNP declined from 0.9 percent the previous year to 0.88 percent. Also, the general account spending declined from 6.2 percent to 5.9 percent, dropping under 6 percent for the first time since the war. The Defense Agency's Internal Bureau expressed satisfaction with the fact that the ratio of personnel costs had dropped while the ratio of guns and equipment had increased, but the uniformed group was reported to be strongly dissatisfied. The reason was that the next generation main fighter planes (FX) wanted by the Air Defense Force Staff Office, the anti-air missile-carrying escort vessels and next generation anti-submarine scout planes sought by the Maritime Defense Force Staff Office, and the arms and equipment requested by the Ground Defense Force [GSDF] were curtailed for the most part.

GSDF Chief of Staff Kurisu, who spoke in behalf of the dissidents at a press conference, criticized the Internal Bureau and the Finance Ministry, saying: "This means the Accounting Bureau has taken over civilian control." Such a statement was unusual. With this criticism of the first budget since the decision on the "General Principles" as a beginning, the uniformed group of officers and the Defense Agency's Internal Bureau which was incited by the officers gradually brought their criticism of the "General Principles" into the open.

The criticism was first directed against the cabinet decision on the ceiling of 1 percent of the GNP. On 14 April, Director Mihara commented on the defense budget at an Upper House budget committee meeting as follows: "The approximately 1 percent ratio of the GNP is not a fixed ratio. Depending on the turn of events, we sometimes have to raise it to the 1 percent level." He thus expressed the opinion that it sometimes exceeds 1 percent. Mihara subsequently repeated his contention that "there is no need to fix defense spending to the ceiling of 1 percent of the GNP." As background for this, at the time the mid-term and long-term defense budget for the post-fourth buildup plan was being drafted by the Defense Agency, and it was predicted that if the FX and the PXL were to be imported during FY-78, the two major projects would incur tremendous costs, making it difficult several years later to keep defense spending under 1 percent of the GNP.

The uninformed group of officials reportedly submitted a demand to the Internal Bureau to increase the ceiling to approximately 1.2 percent. Also, former Defense

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Agency Director Uno (present Science and Technology Agency director) and Economic Planning Agency Director Kuranari stated at the National Defense Council's Diet members discussion meeting in July: "In order to respond to foreign criticism of a free ride, we should not worry about sticking to 1 percent." They thus provided lateral support to the Defense Agency's position.

The aforementioned debate on the 1 percent ceiling was an important event because, several months after the Miki Cabinet's decision, the government itself advocated an amendment to the direction of the "General Principles." However, whether out of fear of a reaction from the opposition or due to the view that the 1 percent ceiling would not be exceeded despite the importation of the FX and the PXL, the debate itself came to an abrupt ending with an "orbital correction" by Director Mihara at the October Diet session, when he stated: "The 1 percent ceiling will be maintained for the next decade."

Meanwhile, there were two noteworthy movements in progress in the background which helped to strengthen the Defense Agency's position and enabled it to make a stronger pitch. The first was the removal of the taboo against defense debate in the Diet. The second was the surfacing of American demands concerning Japan's share of joint defense.

A change of heart among the opposition parties regarding the defense debate appeared typically in a decision on the establishment of a joint security special committee in the Diet. In addition to surprising gains by the centrist parties in the general elections late in the previous year, the Japan Socialist Party (JSP) and the Japan Communist Party (JCP) attracted attention by making it clear that they would actually shelve their previous demand for "abolition of the joint security pact." The Democratic Socialist Party (DSP), which succeeded in increasing its seats in the election with this as a background, again requested the establishment of a joint security committee in the Diet--a long held goal. Seeing the Komeito Party and the New Liberal Club both in agreement with the request, the newly appointed Defense Director Mihara is said to have "worked hard" to gain support for the formation of the committee. There was also said to be a "special order" by Prime Minister Fukuda. At this point Mihara's ability as a veteran in Diet policy affairs was put to full use, and by late May the various parties reached basic agreement on the formation of a "defense special committee" (Tentative title), beginning with the next regular Diet. Thus, more than 10 years after the committee was first proposed by the DSP, there was a firm prospect of realizing the concept. And this initiative by the DSP later set the pattern for its leadership on defense debate in the Diet.

On the other hand, in the July 1977 Lower House elections, the JSP practically avoided the questions of joint security and national defense, further deepening the impression of an epochal change. The opposition parties, presented with a chance to form a government because of the conservative-reformist balance of power, "turned to pragmatism," like a similar situation in Europe, which requires no explanation. It is very interesting to note the paradox from these examples that as the LDP loses power its views are increasingly adopted by the opposition.

U.S. Pressures Strengthen Defense Agency's Position

Second, during this period American demands for a greater defense buildup by Japan and a larger share in maintenance costs for U.S. forces in Japan were presented in

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

concrete terms. Needless to say, the U.S. pressures resulted in strengthening the position of the Defense Agency. We will take up the issue of sharing costs for the use of bases by U.S. forces in our next installment and would like to review here the U.S. demands for the buildup of the Self Defense Force, as well as Japan's response to it.

Already late in the Ford administration, expectations toward Japan had increased, especially in the improvement of its antisubmarine capability. However, due to cutbacks and delays in the fourth buildup plan, the U.S. side reportedly became "strongly dissatisfied with the cutbacks in naval vessels, the absence of a decision on the next generation antisubmarine scout plan and the delay in the modernization of the antisubmarine detector." As a result, a Pentagon report issued in January 1976 included the statement: "The improvement of Japan's antisubmarine capability in the Western Pacific is to Japan's benefit." Even after the Carter administration came into being, the views of the Pentagon and the U.S. forces remained unchanged. Soon after his appointment, Secretary of Defense Brown visited Japan in July of the same year and presented five demands for Japan-U.S. defense cooperation. They included an increased share by Japan in costs for U.S. forces stationed in Japan, and improved antisubmarine and anti-air capability by Japan.

In response to these demands, Prime Minister Fukuda stated in his meeting with President Carter in March 1977: "As Pacific nations, both Japan and the United States fully recognize the importance of the Pacific region. As a link in worldwide cooperation, the two nations will continue their contribution to the security and welfare of the Pacific region." In addition, the phrase, "the maintenance of an enduring peace in the Pacific area," was inserted in the joint communique. This was interpreted as a public commitment to the importation of the PXL to cope with the Soviet Navy, especially its submarines.

These demands on Japan provided powerful support to the call by the Defense Agency for a military buildup, especially for the early import of the PXL and the FX. At the time, the import of the two types of aircraft was under final review as the showpieces of the post-fourth buildup plan, and the Defense Agency had its back against the wall because of the negative stance of the Finance Ministry and resistance by the opposition.

Regarding the FX, just before the Miki cabinet resigned, the decision was made to designate the F-15 Eagle manufactured by the McDonnell Douglas Company, and the Defense Agency--especially the Air Self Defense Force--strongly requested its importation in FY-77. However, the Fukuda cabinet, which barely came into being by a single vote margin, hesitated to launch a major project which would irritate the opposition. Consequently, it was decided at the National Defense Council meeting held in late 1976 that "the related government agencies would conduct a review with the aim of beginning deployment in FY-78," thus delaying the decision to import. Meanwhile, due to its connection to the Lockheed corruption scandal, the PXL became the object of suspicion. It was questioned in the Diet and the decision on a plane selection was delayed considerably.

However, the U.S. demand for Japan's defense buildup was instrumental in the rapid surfacing of the two major projects starting in the spring of 1977, and in August Director Mihara unofficially decided on the Lockheed P-3C Orion as the PXL plane.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

He decided to request a rough estimate budget for it and the F-15 in FY-78. Up to that time, the Defense Agency and SDF officials had been disputing which of the two--the FX or the PXL--should be given first priority, but with Director Mihara's decision the agency took the bold step of requesting both types simultaneously. Regarding the P-3C decision, Director Mihara reportedly had already received instructions from Prime Minister Fukuda and was working actively to gain concurrence from the opposition parties. Apparently, behind this decision was the expectation that although the Lockheed affair had not been settled, the P-3C designation would be approved in the Diet. During the 8 months from late 1977, when postponement of the decision to import the F-15 became inevitable, until the decision in August that year, the Fukuda cabinet had acquired adequate confidence in Diet measures concerning the defense issue.

On the basis of the director's policy decision, the Defense Agency requested 29 F-15 planes in the rough estimate budget for FY-78, with the goal of importing 123 planes under an 11-year plan. It also requested 10 P-3C's for FY-78, with the intention to import 45 planes under a 10-year plan.

Naturally, the Finance Ministry opposed such an enormous outlay. Therefore, during negotiations the Defense Agency presented a compromise proposal to import 100 F-15's under a 10-year plan and the original number of P-3C's under an 11-year plan, but it was made clear that it would not compromise a step further.

Import of New Aircraft Intended To Reduce Trade Surplus

Kanemaru, who succeeded Mihara as Defense Agency director, also made efforts to persuade Prime Minister Fukuda and the Finance Ministry, and succeeded in obtaining a formal decision in the National Defense Council in late December on the import of both types of aircraft. In this case, the Defense Agency's "final draft proposal" on the total number of planes was accepted intact. Also, the decision on the quota of 23 F-15's and 8 P-3C's for FY-78 was close to the agency's request. However, regarding the subsequent pace of procurement, no decision was reached on a definite period for the plan, but a review was to be conducted each fiscal year.

As we have seen regarding the import of the two types of aircraft, both the U.S. demand and the opinion of the Defense Agency, which used it as a lever, were directly reflected in policy measures. In other words, compared to the period ending in 1976 (or further compared to the period of financial reconstruction after 1978), salient points concerning the policy measures were the lack of influence from criticism by the oppositor and lack of restraints by the Finance Ministry.

One reason was possibly the financial conditions at the time. As was stated before, the decision on the adoption of the two types of aircraft was made during the drafting stage of the FY-78 budget. This budget was drafted as the so-called "15-month budget," which was linked to the second supplemental budget for FY-77, and it constituted the "peak in business stimulating measures" in the 1970's. The deficit financing based on a massive issue of national bonds was targeted to the 7-percent economic growth rate demanded by the Western nations, and was decided with "extraordinary determination."

Judging from such a background, the decision to reject the argument to import fully completed aircraft and instead to approve a partial knockdown licensed production was probably based on consideration for the aforementioned business recovery measures.

FOR OFFICIAL USE ONLY

However, unlike public service projects, defense spending tends to center on fixed expenditures and the two projects were both long-range plans spanning more than 10 years. Moreover, the procurement amount in FY-78 was small, with the balance shifted to national bond debt issues. It is absolutely impossible to believe that the Finance Ministry, which sought a business recovery through short-term measures followed by financial reconstruction in the next fiscal year to reduce national bonds, had agreed to the rhetoric on business recovery through such arms production. The reason is that at the time, the Finance Ministry had even been against tax reduction as a business recovery measure because of its fixed nature. Therefore, the lack of resistance on the part of the ministry must be interpreted as due to a reason other than a business recovery measure.

It is probably reasonable to believe that the import of the F-15 and the P-3C was entrusted to the "political judgment" of Prime Minister Fukuda and other cabinet-level leaders, and that it was an issue which was difficult for the Finance Ministry to argue against. And according to the newspapers, consideration for relations with the United States was the focal point in the series of meetings by the National Defense Council. The argument was especially strong for the import of the two types of aircraft in order to correct the trade imbalance with the United States--i.e., the "reduction of trade surplus." One newspaper reported: "At the National Defense Council, Prime Minister Fukuda and others engaged from beginning to end in debating whether or not the import of the new aircraft would serve to 'reduce surplus'." In other words, this issue was debated primarily as an economic issue.

Even when referring to the defense issue, the U.S. request concerning "Japan's defense effort" was merely pointed out, and the adjustment of relations with the United States took center stage. In other words, the need to import the F-15 and the P-3C to strengthen the Self Defense Force so that it could cope with the growing Soviet threat was never mentioned. The newspaper media may have been manipulated, but judging from the speech and actions of the Fukuda administration leaders at the time and later events, the aforementioned reporting could be said to quite accurately reflect the debate in the National Defense Council. If this judgment is not wrong, as far as the top level of the government at this stage is concerned, it could be concluded that the argument of a Soviet threat was not dominant.

Uniformed Group Begins To Express Bold Opinions

However, among the officials in charge of defense, awareness of the international situation and opinions on defense strategy had already undergone a drastic change. This was clearly seen in the FY-77 version of the "Defense White Paper" reported at the cabinet meeting in late July. It is in sharp contrast to the "white paper" of the Sakata era in the previous fiscal year, which begins with an explanation of detente conditions and contains a chapter on "The People and the Self Defense Force," describing disaster relief activities and cooperation with the people's life, and consciously creating a soft mood. The FY-77 "white paper" begins with an analysis of military conditions centering on the Soviet military buildup and devotes many pages to the selection process of the FX and the PXL. The drafters of the Defense Agency's "white paper" reportedly complained that, owing to requests by the foreign minister and aides of the prime minister who were concerned about relations with the Soviet Union, "we could not state a tenth of what we wanted to say." Nonetheless, it is

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

abundantly clear that the keynote of the "white paper" swerved from the SDF's position in the detente era in the direction of an appeal to cope with the "severe international conditions." Seeing the U.S. Defense Department's change to military expansion, and encouraged by changes in the Diet and public opinion, the Defense Agency is seen as beginning to boldly advance its opinions, especially those of the uniformed group.

In this connection, the reader's attention is called to three "events" which occurred in October. First, Ground SDF Chief of Staff Kurisu, who was unofficially designated chairman of the Joint Staff Council, stated: "I would like hereafter to brief the prime minister periodically regarding the military situation." He also stated: "The chairman of the Joint Staff Council, the highest office in the SDF, should be sanctioned by the emperor" and submitted a request to the chief cabinet secretary. Although the request itself did not materialize, it was significant as the first positive statement by a uniformed official regarding the recognition of the Self Defense Force.

Second, the fact that the prime minister publicly announced in the Diet the start within the Defense Agency of "research on a legal system to cope with an emergency situation." Third, the fact that the Defense Agency explained in the Diet its policy not to remove the mid-air refueling and bombing systems from the F-15.

The latter two problems developed into major political issues in 1978. In any case, in the fall of 1977, the Defense Agency disengaged itself from the previous defense posture and began a frontal challenge concerning the defense debate. How the Fukuda cabinet, which had supported it behind the scenes, would interpret this initiative by the Defense Agency from the standpoint of the government clearly became the most important issue in 1978.

[13 Nov 81 pp 35-39]

[Text]. [No 15] Tune of Defense Debate Changes

The year 1978, which was actually the second year of the Fukuda government, was replete with "defense statements" from the outset.

First, Chairman Kurisu of the Joint Staff Council severely criticized the "strictly defense" military policy of the government in the 4 January issue of the aeronautics magazine WING. He stated: "There is a theory which differentiates between aggressive armament and defensive armament, but the distinction is difficult." He concluded: "Military history shows that in any war, attack is the only way to victory. With only defensive means, we would be unable to effectively cope with aggressive acts by forces outside our sphere of action. Any weapon which does not exert psychological restraint on an adversary, so that they cannot predict when a blow will be struck against their base and center of operations, must be construed to be lacking in deterrent effect against the adversary's plan of attack."

Meanwhile, on 8 January, Director Kanemaru, who addressed the 1st Airborne Brigade of the Ground SDF, stated: "Our nation will not invade, nor will it be invaded. The SDF is a purely defensive military force. Nonetheless, although some people say the SDF must not pose a threat to other countries, what is defense without posing a threat to an enemy? A purely defensive SDF must not pose a threat of invasion or attack to

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

foreign countries, but it is necessary to pose a threat in the sense that we will not allow them to think they can invade us, and to let them know that invading Japan will prove to be costly."

Although there is a latent and important contrast (for example, concerning the evaluation of the term "purely defensive") in the statements of the two men which later resulted in Kurisu's resignation, they were of pivotal significance in the defense debate in that both publicly used the terms "deterrent" and "threat," which had been taboo until then.

Furthermore, in the sense of a continuation of the two statements, Prime Minister Fukuda referred to the "defense issue" in his policy speech on 21 January, as follows: "The defense of a nation must be considered to be the base of the nation's existence and the foremost duty to be performed by the government. The government intends to secure smooth and effective implementation of the Japan-U.S. joint security pact and to devote its efforts toward the buildup of necessary defense strength. However, the basis for defense is the people's will to defend their country. It is the national consensus. It is indeed a happy thought that, in recent years, the people's understanding and concern regarding the defense issue has been mounting, and it is our earnest expectation to have the defense issue discussed constructively and widely, in all quarters, as an issue before the entire nation."

This speech uses far more abstract terms than the previous statements by the two leaders, and it is seen as carefully avoiding any irritation to the opposition. However, it is the first postwar policy speech dealing directly with the defense issue, and in that sense it may be considered as an extremely noteworthy one. As for its content, the prime minister himself reportedly inserted such terms as "defense issue," "economic recovery" and "promotion of social development" in the drafting stage, and gave instructions for the terms to be treated as "the three pillars."

As a backdrop for this, Prime Minister Fukuda was strongly impressed by the fact that, at the "public debate on the people's awareness" jointly sponsored by the Kansai Keizai Doyukai (Kansai Committee for Economic Development) and the Osaka Liaison Council for Private Labor Unions late the previous year, not only management but also Chairman Takabatake of the Matsushita Electrical Industrial Workers Union "advocated a defense buildup and the revision of Article 9 of the constitution." The prime minister was also said to be encouraged that Chairman Takeiiri of the Komeito Party advocated the constitutionality of the Self Defense Force at the party's general convention on 11 January, albeit as a personal opinion. In any case, the speech represented the Fukuda cabinet's posture of aggressively grappling with the defense issue in view of the change in the opposition's attitude.

On the other hand, the opposition, which received the challenge to debate, was not prepared to react aggressively, and it was forced to adopt a passive stance. Regarding Prime Minister Fukuda's policy speech, there was reportedly "not much reaction" in the Diet, nor did the opposition come forth with much substantial criticism against the Kanemaru statement. Kanemaru himself said: "It seems that many opposition members have understood my convictions, and during the past year there has not been a single case of trouble during my speeches in the Diet."

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

However, regarding the Kurisu statement, Masashi Ishibashi and his colleagues of the Japan Socialist Party came up with severe criticism and demanded his resignation on the Diet floor. Kanemaru accepted this criticism and was obliged to explain: "Director Kurisu's argument lacked adequate explanation, and he has been cautioned regarding his speech and actions." But the matter was not pursued any further. The fact that the opposition let the matter drop at this point, while publicly criticizing pure defense which is the major premise of Japan's strategy, could be interpreted as prime evidence of the lackadaisical nature of the opposition's criticism.

Pivotal Adoption of the F-15

In February, the problem held over from the previous year of whether to remove the F-15's bombing and refueling systems flared up anew, and at this point the "ceiling on the defense strength" became the focus of debate in the Diet. Here, also, the administration countered the interpellations by the opposition and challenged the taboos on defense.

The origin of this problem goes back to November 1972 during the Tanaka administration. At the time, the government stated the following regarding the opposition's questioning of the adoption of the F-4 Phantom fighter: "In order to abstain from posing a threat to foreign countries, we will not attach the bombing system." Again in April of the following year, Prime Minister Tanaka stressed the three general principles: "We will not refuel in mid-air, we will not maintain refueling planes and we will not conduct training in refueling." However, in adopting the F-15, efforts were apparently being consolidated within the Air SDF to change this policy. In late October 1977, Defense Bureau Chief Ito stated in the Diet the policy not to remove the bombsight and mid-air refueling systems from the F-15.

The JSP immediately criticized and questioned this, whereupon Ito replied: "First, the F-4's bombing capability was high at the time, but the F-15's primary capability is effective today when low altitude, high-speed infiltration is possible, and it is better to obtain the cooperation of the U.S. forces in making mid-air refueling possible." However, he added that this policy "is the wish of the Defense Agency secretariat, and not a government decision." Also, Prime Minister Fukuda held his opinion in abeyance, saying: "It is not a decision of the National Defense Council nor of the government." At this stage in the fall of 1977, he apparently decided to let the Defense Agency take the initiative and to observe the opposition's moves.

In late January the next year, the JSP again took up the issue in the Diet and questioned the government. That is, Diet member Tetsu Noda asked if the F-15's bombing and refueling systems didn't exceed the limits of defense by posing a threat to other countries. Chief Mada of the cabinet's Bureau of Legislation replied: "Stated succinctly, the question is whether the other side would feel a threat." "Depending on the progress of science and technology at that point in time, there should be allowance for a change in the limits of self-defense permitted by the constitution." This argument gave legitimacy to the position of the Defense Agency. However, he repeated the statement that "in the absence of professional military expertise, one could not say whether a threat is posed or not" by the F-15, whereupon the JSP demanded that the Defense Agency submit a document stating whether the F-15 and the P-3C constituted fighting power.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Two weeks later, the Defense Agency documented its view that "the F-15 and the P-3C do not constitute the 'fighting power' banned by the constitution," and submitted it to the Diet. In it the Defense Agency stated: "With regard to the concrete limits to defense power permitted under constitutional control, it cannot be denied that it has a relative aspect which is changeable according to international conditions and the levels of military technology and other conditions at the particular time." It thus contended that the import of the F-15 and the P-3C was decided "on the basis of consideration for changes in the level of military technology."

This document continues to represent the Defense Agency's viewpoint, but it was submitted with the approval of the Bureau of Legislation and Prime Minister Fukuda. It is in reality a government opinion. It is the first government document to state: "The limit to defense power is relative," with the implication of broadly removing the restraint on SDF arms hitherto imposed by the administration out of concern regarding the opposition. With the concrete issue of the adoption of the F-15 as a pivot, the Fukuda cabinet discarded past government views and, in one stroke, changed the defense policy.

The JSP strongly protested that "such a view would mean the recognition of all weapons, including nuclear arms, for the reason that they are relative." On the following day, the JSP issued a party statement severely censuring the government, saying: The Fukuda cabinet is promoting a drastic buildup of arms and a resurgence of militarism." It also pointed out: "Since his inauguration, Prime Minister Fukuda has openly resorted to reactionary and nationalistic moves, such as designating the "Kimi ga yo" as the national anthem, legalizing the era names of emperors, putting national anniversary activities under government sponsorship and planning the amendment of the criminal code to worsen it. The JSP, which had hitherto stressed antirecession measures, added "antimilitarism" as an important issue to its struggle in the Diet. It thus made public its determination to activate a nationwide mass movement.

Taboo Against Nuclear Weapons Challenged

Meanwhile, the government offensive in the Diet continued to upstage the interpellations by the opposition. At the Lower House budget committee session on 18 February, Defense Bureau Chief Ito replied to an interpellation by a JCP Diet member: "From the standpoint of the constitution, we may possess defensive strategic weapons. We may possess short-range cruise missiles without warheads." Subsequently, on 9 March, the government formally submitted a document, unified opinion and stated its position: "Although we will uphold the three non-nuclear principles as a policy, we do not believe that all nuclear weapons are banned by the constitution." The opposition could not fully counter this, and as a result, the taboo against nuclear weapons was quickly annulled.

However, a noteworthy point in the abovementioned defense debate was that the aim of the legal argument from the government side, stemming from the F-15 issue, was strictly to challenge the taboo against defense, and was not intended to expand armament beyond the import of the F-15 and the P-3C. Moreover, even supposing that the Fukuda cabinet, which was facing a financial crunch, did have such an intent, it was totally unfeasible from a financial standpoint. Director Kanemaru formally denied the idea of a defense strength requirement, saying: "The maintenance of 2,000

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

aircraft by the USSR in the Far East does not mean we need 1,000 planes." He also said: "I believe the present approximately 400 planes is adequate for Japan." It is clear from this that he intended to limit defense strength from the standpoint of volume. In that sense, the JSP's criticism that "the Fukuda cabinet conducted a deliberate campaign for defense buildup" cannot escape being accused of overstating the government's intent. (A later chapter will deal with the interpretation of this "intent".)

However, it is also a fact that, at the time, foreign criticism of a "free ride" and demands for a military buildup and expansion of arms production were increasing because of a business recession. For example, at the Kansai financial seminar which opened in early February, Hosai Hiuga stated in his keynote address: "We must not rest lethargically on the Japan-U.S. joint security pact, but must frontally review our defense direction." This was reportedly followed by a succession of statements on defense, which were clearly caused by a concern with "defense complications" (criticism of a "free ride") with the United States. Also, between late February and early March, President Nagano of the Japan Chamber of Commerce stated: "The government is over-restraining itself concerning arms export." He was speaking in behalf of the shipbuilding industry, especially the small and medium shipyards, which were suffering from the business recession. Meanwhile, the aircraft manufacturing and shipbuilding workers unions began in 1975 to petition the government to start "domestic production" of weapons.

The problem was whether such "pressures" would serve to further Japan's military expansion, regardless of the intent of the Fukuda cabinet. However, during this period, the Fukuda cabinet's economic measures were producing sound results vis-a-vis the recession and the trade surplus. The business stimulating measures through the 15-month budget showed results during the last half of FY-78, achieving a real growth rate of 7 percent in domestic demand, a change to a deficit in the current foreign account balance, and an overall 5.7 percent growth rate. As a result, not only did the expectations for arms production due to the recession suddenly die down, but fears of anti-Japanese pressures also temporarily subsided. The solution to the economic crisis became an extremely important factor in restraining any runaway "militarization" policy by the Fukuda cabinet.

Moreover, "financial reconstruction" was the urgent purpose of a massive issuance of national bonds carried out as a business stimulant measure, restraining the expansion of defense spending from a financial standpoint. Therefore, as we will explain later, the Finance Ministry would prove to be the major stumbling block to "militarization." This condition continues today, as is common knowledge.

On the other hand, as is clear from all this, the opposition, which shared a braking role with the Finance Ministry, could not prevent the Fukuda cabinet's "militarization." Several factors have been pointed out. First, all of the opposition parties considered countermeasures for the deepening recession to be their major policy task. They questioned the government on the defense issue and avoided delaying economic policy measures. It is said especially that "the SOHYO (General Council of Trade Unions), which focused its struggles on recession and employment countermeasures based on concern for private enterprise workers unions, had an impact on the activities of the JSP."

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Second, the response of the "mass movement" was much slower, and this affected the response by the opposition. For example, Director Ueda of the JSP Education and Propaganda Bureau did some self-reflecting and noted: "We are not fulfilling our mission if we cannot even quickly unite to protest against the U.S.-South Korea joint maneuvers." And Director Tatebayashi of the People's Movement Bureau also reportedly said regarding the port reentry of the Midway: "We regret that there were practically no calls within the party for a mass movement." Observing these conditions, Chairman Asukata realized the need for a policy change and said: "Times have changed so much that the mere slogan, 'Young people, do not take up arms,' has no appeal for the younger generation."

Third, the opposition parties hesitated to confront the government because, if they made defense an issue, it would cause splits within the respective parties. For example, within the JSP, the pro-China element was put in a delicate situation because China approved the Japan-U.S. joint security pact and the Self Defense Force. In the case of the Komeito Party, the LDP's appraisal of Komeito Chairman Takeiiri's statement in January caused complex repercussions within his party on the joint security pact and the SDF because there was no party consensus. A similar problem existed within the Democratic Socialist Party. Among the unions affiliated with the DOMEI (Japan Confederation of Labor), there were some unions, such as the shipbuilding and aircraft manufacturing unions, which advocated the "domestic production of arms." However, not a few among the DOMEI and DSP members were concerned about the government's "militarization."

Fourth, regarding the defense issue, the consensus among the opposition was fading more quickly than within the respective parties, and it was difficult in view of the increasing multiparty trend within the opposition to effectively question the government. Consequently, despite the conservative-reformist balance of power, the LDP was able to take a much stronger initiative concerning defense policy than during the Sato and Tanaka governments when it enjoyed an absolute majority. This was in sharp contrast to the introduction of tax cuts, where the opposition's influence in budget formulation had been drastically strengthened.

Fifth, probably the most important reason was that the opposition, unable to raise an effective argument against the LDP's contention, failed to make a strong appeal to the nation. We will discuss the causes in more detail.

Military Power On Par With Advanced Western Nations Is Goal

Until that time, the opposition always interpreted the LDP's defense theory as "a return to prewar days" and criticized it as indicating a rightist, fascist and militarist trend. However, at the time, the LDP and the Defense Agency were extremely careful not to commit any expressions which could be interpreted as a turn to the right or militaristic. As a backdrop to this is the fact that with the end of the 1960's as a dividing point, the LDP Diet members in charge of defense affairs passed from the tradition of former military officers to the postwar generation. As we have already stated in our discussions about Nakasone as director of the Defense Agency in this series, the LDP's defense argument in the 1970's had been "modernized" to the point where it appealed to the intermediate age level of people who had their own homes to protect.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

In this sense, the Nakasone concept and the Sakata concept are on the same track. So was Director Kanemaru at the time. From 1977 to 1978, Diet members in charge of defense like Minoru Genda, who could not disassociate themselves from their ties to former militarist ideology, could not play a key role in the party's defense policy, and it was no simple coincidence that two "doves" like Shin Kanemaru and Michita Sakata led the defense debate during the Fukuda era, from their respective positions as Defense Agency director and chairman of the party's Security Investigation Committee. Kanemaru's defense theory will be reviewed in detail later, but it was undoubtedly based on the denial of Japan's transformation to a military power and supportive of the strengthening of the Japan-U.S. security pact. If Kanemaru looked like a "hawk," it was as in Makasone's case merely a frank explanation of his position. There was nothing in his rhetoric which smacked of any rightist trend or advocacy of military power.

In a word, it would not be an over statement to say the defense debate of the Fukuda cabinet at the time sought to establish armament equal to that of advanced Western nations, and to build a relationship of military cooperation with the United States on a par with NATO. Unless the Western nations are viewed as fascist and militarist, it would not be proper to label the defense policy of the Fukuda cabinet as rightist or militarist.

Of course, it is fully possible for Japan to be criticized for not actively contributing to world peace through disarmament. Probably the most severe criticism of postwar Japan's defense policy is directed toward its total lack of effort toward world peace. While criticism is directed toward its subservience to "global militarization," it is different from the JSP's censure of "a return to postwar days" and "a road to fascism." Seen from global military "commonsense," there was nothing to be criticized in the Japanese Government's policy at the time...especially in Director Kanemaru's concept of "deterrence through threat."

For example, regarding the F-15's bombsight and refueling systems, the JSP criticized the "threat to foreign countries." However, China had already approved of Japan's military buildup, and the ASEAN nations and South Korea, while not completely without concern about Japan's militarization, did not feel threatened by its current degree of armament. They even indicated that they welcomed the strengthening of Japan-U.S. armament in the face of advances by the Soviet Union. On the other hand, it was unseemly for the USSR, which possessed enormous military power, to contend that it was threatened by a post-fourth defense buildup by Japan. The threat to foreign countries thus ended in a mere "abstract theory." As a result, the JSP's criticism remained a "procedural" debate which was at variance with its past testimony. It was therefore not surprising for the government to devote itself to a "legal debate," which stressed the consistency of its replies to Diet interpellations, rather than to discuss the necessity of national defense.

Furthermore, if the recognition of the SDF were to be a premise, it would be nonsense to remove the bombsight and refueling systems from the F-15's, which were purchased at high prices. If the criticism by the JSP, which did not recognize the SDF, were to be accepted and the systems removed, it would indicate an irresponsible lack of vision and an unprincipled reaction to the trend of the times. Such opportunism would pose greater danger if public opinion were to turn to the right, and it would be difficult to expect strong civilian control over the SDF from such a government. In that sense, the position taken by the Fukuda government must be deemed to be much more logical than the Tanaka government.

FOR OFFICIAL USE ONLY

Rightwing Policies Promoted Outside of Defense Realm

It was Director Kanemaru who had most strongly advocated such a position within the government. In retrospect, he wrote as follows: "What can you do with government officials who talk about consistency in Diet debates and yet do not make sense when talking about the bombsight and refueling systems for the F-15? Therefore I told the Agency officials: 'If the bombsight and refueling systems are removed from the fighter plane, what will you have left? The purchase of expensive late-model jets with the people's dear taxes and the training of pilots at high cost surely were not for the purpose of enabling them to enjoy supersonic flight in singleseat passenger planes. Actually, the government was wrong to remove the bombsight from the Phantom jet. It was also wrong to remove the in-flight refueling system. The problem is control over politics, and the SDF absolutely cannot be permitted to act without restraint like the old Imperial Army. Tell them that I, as the director of the Defense Agency, and the prime minister will be responsible.' Those were my strong words to the officials."

"My strong persuasion also to the cabinet's Bureau of Legislation resulted in Bureau Chief Mada's talk in the Diet advocating 'a change in defense power proportionate to the progress of technology.'"

The JSP, with its policy of attacking the LDP's previous contradictory rhetoric, born out of concern for opposition views and public opinion, proved to be no match for the abovementioned logical argument of the government and LDP. The JSP therefore resorted to the criticism that, since the history of democracy in Japan was short and civilian control was yet to be established, despite the LDP's announced intent of a "medium-level military state," and despite its ostensible statements, the LDP's real intent was to conceal its aim to turn to the right and build a militarily powerful state. In other words, the JSP argued that Japan was a peculiar nation which, once freed from its restraints as a peaceful nation, could not remain at the same level of armament as advanced Western nations.

From the standpoint of the framework of this series, the JSP's argument was that Japan's "militarization" was inevitably linked to "a turn to the right" and "bureaucratization" which would rapidly turn "militaristic." The central theme of this series is actually to review the validity of the JSP's contentions.

As for the "real intent" of the LDP, despite the pains the Fukuda administration took to avoid any linkage to prewar aspects in its defense policy, it actually promoted "rightist" trends in other areas pertaining to the national flag, the legalizing of the era names of emperors and worship at the Yasukuni Shrine. Later, we want to review in detail the influence of the LDP rightwing and the prime minister's own philosophy concerning this problem, centering on the legalization of era names.

On the other hand, concerning the potential "objective conditions" for Japan's development as a military power, we could point out the expectations and pressures by the munitions industry and labor unions for defense production, as well as "unrestrained behavior" by the uniformed officials. As we have already explained concerning the munitions industry, this danger had declined, at least temporarily, in the last half of 1978 because of a change to favorable economic conditions. However,

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

with respect to unrestrained behavior by uniformed officers, Kurisu's frequent statements provided the opposition with excellent fodder for criticism. Kurisu's statement in July 1978 on emergency legislation was a prime case. In our next installment, we would like to review the contentions of Kurisu and the SDF from this angle.

COPYRIGHT: Asahi Shimbunsha 1981

5884
CSO: 4105/23

[20 Nov 81 pp 29-33]

[Text] [No 16] Chairman Kurisu of the Joint Staff Council suddenly resigned following the ordinary Diet session in 1978, which had been characterized by a continuing defense debate. In this article, I would like to examine the meaning of the Kurisu resignation.

Kurisu, at a regular press conference on 19 July 1978, stated: "Because of many flaws in the present Self Defense Force Act, it is possible that the Self Defense Forces would take supra-legal action in an emergency." In reaction to that statement, Defense Agency Director General Kanemaru recommended Kurisu's retirement to the prime minister on the 21st, obtained his approval and directed Deputy Director Maruyama to persuade Kurisu to submit his resignation and to persuade and obtain the approval of the Internal Bureaus and that of various chiefs of staff. Kurisu submitted a letter of resignation on the 24th. Kanemaru accepted it and released him officially as chairman of the Joint Staff Council. Kanemaru made the following statement about the "release" at a press conference. "The statement about such things as "supra-legal action", whether true or not, caused the misunderstanding that it is possible for the Self Defense Forces to act without regard for the law. This is not an appropriate statement for the chairman of the Joint Staff Council. The past statements of Mr Kurisu have been attacked in the Diet and, due to a number of considerations, I have decided to accept his resignation." This is the history of the "release."

However, this "supra-legal action statement" was reaffirmed in a SHUKAN POST interview and his aim seems to have been to point out the legal problems involved in emergency action by the Self Defense Forces and declare the need to revise the laws. Therefore, this statement implied criticism of the Defense Agency director general's office, which has responsibility for preparation of laws. The Defense Agency director general's office had appeared to side with the military in promoting defense in the defense debate, but in this context we can see why it switched to criticizing Kurisu on this issue.

However, if we carefully examine the development of the defense debate under the Fukuda government, we see that a conflict between the military and the Defense Agency, or rather, a challenge of the civilian officials by the military, occurred from time to time. Clearly the Kurisu statement was not just a spontaneous occurrence.

FOR OFFICIAL USE ONLY

For example, Kurisu appeared on Nippon Television and stated that "the Soviet Army is conducting large-scale exercises on Etorofu" and this statement was criticized in the Diet. In response to this, the director general's office in the Defense Agency criticized Kurisu for making a careless statement. The premise of this criticism was that the announcement of such news was exclusively the job of the director general's office. The only reason that the Defense Agency officials took such a strong stand against Kurisu was that they felt a challenge to their authority.

With respect to this problem, Keiichi Ito, director of the Defense Bureau, stated: "Because there is civilian control, we cannot have even the chairman of the Joint Staff speaking as he pleases. We understand the desire of the military to report on the movements of the Soviet military to the people and increase their awareness of the need for defense. However, if they go outside the channels of civilian control, it could lead to a repeat of the mistakes committed by the old military." Kurisu responded to this by saying: "The chairmanship is the highest military position, equal to a vice minister. We will accept civilian control in the form of directions from the director general but not from a vice minister. Information about the exercises had been reported to the director general. I made the decision to announce it." Kurisu's rebuttal was based on his professional pride, holding that the military has superior specialized knowledge in judging the military situation.

This series of "Kurisu statements" was somewhat related to the individual personality of Kurisu, but they should be seen as the result of more structural factors. In other words, increased awareness of the "Self Defense Forces" and the growth of an active defense debate provided an opportunity for restoring the authority of the military, and this resulted in a challenge to the civilian control of the Defense Agency. In this sense, the challenge to the Defense Agency was the natural result of the more active defense concerns which emanated from the Fukuda cabinet. And the ultimate result was Kurisu's "supra-legal action statement."

From another angle, Director General Kanemaru felt that the "supra-legal action statement" might destroy his careful efforts at building an agreement with the opposition parties. There was already the state of affairs described in the statement in WING by Kanemaru at the time Kurisu criticized the "strictly defense" policy. "In order to protect the interest in defense that was finally emerging among the people, I took a strict approach and gave a stern warning to Chairman Kurisu."

Specifically as a response to the gains of the Socialist Party, he had publicly proposed: "If such a thing (infringement of civilian control) occurs again, I will take stern action." An "opposition party friend" told him over and over: "Because you are a close friend, Mr Kanemaru, he will probably be persuaded this time. But the problem should not be treated lightly. That statement has deep roots. We want you to put a stop to the outbursts of the military. Let me tell you: You're on probation, you're on probation."

Because of the accumulation of statements and the inflammatory wording of the "supra-legal action statement," Kanemaru decided that he "could not get through the next Diet session," and he immediately decided to release Kurisu. It is reasonable to assume that Kanemaru's decision was made mainly as a strategy aimed at the opposition parties.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

It is not surprising that the hawks within the LDP criticized this concession to the opposition. At the LDP general meeting following the decision on release, the Upper House LDP hawks defended Kurisu. For example, Kazuro Tamaoki, representing the Upper House Executive Committee, requested "reconsideration of the release." He gave the following reasons: "The chairman only said what was natural as a professional. It is not the fault of the military that there is no policy for action before an emergency. It is because we and the government are negligent." Expressing concern over the situation, he also said: "If we do something like this, the Self Defense Force members on the frontlines will lose the will to fight."

Kurisu Statement Expresses Feeling of the Self Defense Forces

Kanemaru made a speech before the Defense Production Committee of the Keidanren in which he explained his decision: "I believe civilian control means that we cannot go back to a prewar Japan." "I felt that if I did nothing about the recent Kurisu statement, there was a danger of something happening just like the Marco Polo bridge incident." By switching the point of the argument from a political consideration of "the possibility of misleading public opinion" to the basic principle of civilian control, the director general fully supported the Defense Agency's position in the conflict with the military. This is because he made an issue of the fact that Kurisu had made a statement to the outside rather than of the content of the statement. Also, by bringing up prewar experience, he indirectly criticized Kurisu as having the same ideas as the old military.

It is not surprising that Kurisu thought this criticism was inappropriate. That is because, regardless of how the statement was made, the supra-legal action statement demanded legal preparation. However, if the situation is examined in a wider context, it is undeniable that the Kurisu statement of the 19th was a demand for restoration of the authority of the military and a part of the challenge to "Japanese-style" civilian control. Kanemaru did not argue this point systematically, but at least he seemed to sense it with his politician's intuition. Here, I would like to analyze and examine Kurisu's declaration systematically from this point of view.

In brief, Kurisu's statement directly expressed the perspective of military leaders with the responsibility for directing troops on the frontlines. It directly reflected the interest of the Self Defense Forces as an organization. His statement aroused public criticism because of its directness. But it was not just a careless remark. That is why it was dismissed as a problem of a particular personality. His assertion was the assertion of the Self Defense Forces as a body. Therefore, the conflict between the director general of the Defense Agency and the chairman of the Joint Staff Council, which emerged in the form of Kurisu's dismissal, must be seen primarily as a result of a structural conflict between the military and civilian authorities. Let us look at the situation from the military's point of view in detail.

The following episode shows a connection between a conversation between Kurisu and Self Defense Force pilots about the MiG-25 incident and the supra-legal action statement. Kurisu asked: "What would you do if during emergency deployment you approached a Soviet aircraft and it began firing?" The pilot replied: "We are not allowed to fire any bullets." When questioned further, the pilots gave the following answers. "We are resigned to our fate. If we are not allowed to shoot bullets, we must ram the Soviet plane." "Japan does not allow the action I would try to take. I would

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

end up doing something that the country would punish me for. Even if I thought I was doing what was correct, I would become a criminal, so it is like having someone holding on to your hair from behind."

Following this, Kurisu wrote the following: "There is also great anxiety on the part of the officer and controller directing emergency deployment of aircraft. Even when danger approaches, the officer cannot order his pilots to fire on the enemy. Even if the officer gives such an order, it cannot be considered legitimate. The law says that the pilot must not follow it. Therefore, he will say, "Do what is necessary." This means: "You know what to do." The pilots are prepared to attack. This is a case of nonverbal communication."

It is easy to imagine how the top military leader, the chairman of the Joint Staff Council, must feel about this situation. The judgment that a Soviet attack on Japan could not occur cannot be the standard for the Self Defense Forces, which must take action in an emergency. From the point of view of Self Defense Force members, the Self Defense Forces are constantly in a battle situation because of Soviet encroachment on Japanese airspace. They are placed in a life or death situation. Therefore, the military began to make the criticism that, in spite of this situation, the Defense Agency neglected legal protection of Self Defense Force members because of concern for public opinion and the opposition parties.

The director general and other officials of the Defense Agency recognized the legitimacy of Kurisu's criticism and did not attack it within the agency, but they made his actions into a scandal outside. In response to this, Kurisu explained the problem as follows. "Throughout the history of the Self Defense Forces, the military continually made demands internally and the Defense Agency cut them off. It continually ignored the heartfelt desires of the troops on the frontlines. This is a problem with a long history." He explained that he was forced to make his criticism public because it had no effect internally.

Demanding a Position for the Military Above the Civilian Officials

Kurisu's criticism of the civilian officials did not end with the legal flaws mentioned above. Rather, it is fair to say that Kurisu was extremely dissatisfied with the Defense Agency with respect to general formulation and execution of defense policy. His major grievance was that the military was not even given an opportunity to voice its criticism. For example, he criticized the situation analysis of the "Defense White Paper" as follows.

"The greatest prerequisite for formulation of defense policy is an analysis of the military and political conditions of the opposing military force. Therefore, the Self Defense Forces are continually engaged in the collection and analysis of data. My job as chairman of the Joint Staff Council was to look over the information collected and, even if it was insufficient, to make situational judgments. Ordinarily, that was my most important job. However, nowhere was this analysis of information by the Self Defense Forces incorporated into the 'Defense White Paper.' It was not even communicated to the political leadership.... If the military says, 'That is incorrect,' the Defense Agency protests vehemently, saying, 'Are you going against government policy?'

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

"It is the same thing as saying that once the overall defense plan is made we should not complain about anything. The "Defense White Paper" was written according to this kind of thinking, so if we say that something in it is problematic, they respond by saying, 'Are you going to oppose cabinet policy?' Therefore, no one inside the Self Defense Forces is in a position to say anything about the 'Defense White Paper'."

This criticism pertains to the fact that the military was not given the authority it should normally be provided in consideration of its duties. In other words, it is asserting a demand for "reasonable" influence inside the government. Let us quote from Kurisu's statement again.

"Under the Self Defense Forces Act, nothing pertaining to information is included in the duties of the bureau directors or secretaries in the Defense Agency. In contrast to this, collection and investigation of information concerning defense is listed among the duties of the Joint Staff Council.... In spite of this, military situation judgments are reported to the director general of the Defense Agency by departments and bureaus within the agency. When I was chief of the Administrative Bureau of the Joint Staff Council, I discovered that the bureaus of the Defense Agency made military situation reports.... When I became chairman, I told the chiefs of staff that this custom existed. It was most extreme at the time of the installation of a new director general of the Defense Agency. I said I was going to protest, but the chiefs of staff said it would create obstacles in future work if such a thing were done right after the director general took office and suggested that I not say anything for the time being. So I did not interfere at that time. They went ahead and made the military situation report without my attendance or anything."

It was for exactly the same reason that Kurisu declared that he wanted to make a military situation report to the prime minister as soon as he was installed as chairman of the Joint Staff Council.

As indicated here, the demands for authority by the military usually emerged in the form of power struggles between the military and the Defense Agency. In this conflict, Kurisu defined military authority as "military command" rather than the "military administration" of the Defense Agency's authority. He attempted to justify this as professionalism.

"I actually said in meetings that 'there is a clear area of military command.' But the bureau directors said: 'Not at present. The military administration covers everything.' When I asked, 'What happens when actually conducting operations with troops?', they said, 'Conducting operations costs money, so that is related to the budget. Also, equipping the troops comes under the province of the military administration.' They went that far. It is a ridiculous argument to say that even strategy comes under military administration."

"After I was in office, I continued to maintain that there is such a thing as military professionalism. We, as the military, should have pride and maintain it. Also, we should get the civilian officials to recognize this."

In this fashion, Kurisu demanded that the military, which is subordinate to the Defense Agency at present, be put on an equal level. In his ideal of civilian control,

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

"the Diet which is elected by the people and the prime minister chosen by the Diet should exercise civilian control. Therefore, even though they wear civilian clothes, there should be no bureaucrats included in the concept of civilian control. The basic principle of the Self Defense Forces Act allows for a two-part organization made up of the Defense Agency and the military to advise the director general of the Defense Agency. One thing I worked for while I was in office was to break up the present system in which the Defense Agency has a superior position and return to the basic principles of the Self Defense Forces Act."

However, there is more contained in Kurisu's demand than just equality with the Defense Agency. He demanded that politicians "set the large policies and framework. All action within those limits should be entrusted with and left to the officers at each level of command." He justified this by saying: "Areas of professional competence should be left to professionals." First, we should note that this became a demand that the military should be in a superior position to the Defense Agency because the civilians lack specialized knowledge. In reality, his specific proposal for revising the system aimed at an almost total dismantling of the Defense Agency bureaucracy. He proposed that control by the Defense Agency should be limited to control in budget areas only. Second, the concept of professional autonomy in military areas leads to an argument for the exclusion of all control, not just that of the Defense Agency. Kurisu brought up the American failure in Vietnam and took a position opposing interference in strategy by top leadership such as the president of a country. However, in the present situation of Japan, it is reasonable to suppose that the purpose of his series of statements was mainly to revise the system of civilian control in which the Defense Agency is in total control and which is "quite excessive" from the viewpoint of "international commonsense", and make it "similar to Europe and the United States."

Distrust of Military Deep-Rooted in Conservative Mainstream

This "Japanese-style" civilian control is an organized form of the strong distrust of the military based on experiences before and during the war. The idea of civilian control was originally based on a distrust of military professionals. Because of the Japanese experience of militarism, there is a strong distrust of the military even among the political and economic elite. And that has placed the military in a subordinate position in the system.

Although defense capability has grown in terms of the budget since the time of Shigeru Yoshida, the distrust of the military felt by Yoshida took hold in the defense ideology of the conservative mainstream. It came down to the Fukuda government with hardly any change. In this respect, one could say that the military was not "recognized" even by the LDP.

Furthermore, Kanemaru announced this mainstream conservative thinking on every occasion after he became director general of the Defense Agency. For example, a book he wrote contains this passage: "I was born in 1914, so I saw the escalation of military activities from the 15 May incident to the 26 February incident and the tragedy of Japan's defeat in World War II, the Pacific war, with my own eyes. I was conscripted into the army as a private. I experienced treatment many times based on the idea that military men were superior and 'others are not true Japanese.' In that situation, I seriously wondered, as a young man, 'With things like this, what

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

will become of the future of Japan?" There was no freedom. Speech was controlled. Because of one red piece of paper, it was necessary to select the path of death. 'Is this the way a country should be?' This anguish penetrated to the marrow of my bones. This feeling did not change at all when I became director general of the Defense Agency." He repeatedly made such pronouncements. "We must not go back to a prewar Japan. This is the first step in thinking about national defense." "The director general of the Defense Agency is the guardian of the ironclad principle that 'The civilian government takes precedence over the military'."

With respect to the issue of civilian control, Kanemaru steadfastly maintained the position, based on similar experiences, of former Director General Sakata who was responsible for determining the "defense guidelines." He supported complete control of the military by the Defense Agency. We cannot appreciate the "understanding" of Kanemaru's defense policies shown by the opposition parties without this background. Therefore, Kurisu's series of statements were a hindrance to the "trust" between the director general and the opposition parties. The quick response by Kanemaru to the supra-legal action statement demonstrated Kanemaru's strong convictions.

From these circumstances, we can see that Kurisu's criticism of the Defense Agency actually implied a challenge to the defense ideology of the conservative mainstream. However, at the time, Fukuda, who was able to control the rightwing of the party, was in power, and he gave total support to Kanemaru. Therefore, this challenge did not create a rift in the party. If an incident like this had occurred while the Miki government was in power, circumstances might have been different.

In any case, the first challenge by the military was avoided through Kanemaru's decision for "release". However, this certainly did not mean that the problem was solved. This is because Kanemaru's policy of breaking down the taboo on defense itself made it difficult to prevent statements by the military. The Kurisu statement was induced by this policy of the Fukuda cabinet.

Furthermore, if the defense question is treated as a technical problem of national defense rather than as a problem of constitutional principles, the voice of military officials, as professional experts, will inevitably become stronger. In fact, the Democratic Socialist Party conducted talks with the chiefs of staff of the Air, Ground, and Maritime Self Defense Forces in August 1978, and there have been stronger demands that the opinion of the military be heard by the Special Committee for Security Affairs in the Diet.

Military Challenge Not Ended with 'Release'

Also, it is difficult to give convincing reasons why the military professionals should not report to the prime minister on the military situation as demanded by Kurisu. It is not logical to recognize the Self Defense Forces but not give them the right to speak. To borrow Kanemaru's own phrase: "It does not make sense to use the people's tax money for military situation analysis and then not use it in government policy. Presumably, we are not having it done for the amusement of the individuals involved." If we are aiming at becoming a medium-size military power similar to the countries of Western Europe, it is difficult to reject Kurisu's claim that "at least, we should allow the military to have as much political influence as in the countries of Western Europe."

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

This became very evident in the work on strategic plans and emergency laws carried out by Kanemaru. The strategic plan and emergency laws are related to the area of "military command" for actually moving troops. In an emergency, or in preparing for a hypothetical emergency, the influence of the military leaders as military professionals inevitably becomes stronger. The following statement by Kurisu accurately reflects his awareness of this fact:

"In an emergency, it will be necessary to create a consolidated force, if only from military necessity. And again, the Defense Agency resists this. If a consolidated force is to be created, the joint chiefs will have to have authority over all operations. The Defense Agency does not like that." "In an emergency, or in other words, in time of war, civilian control will be entirely in the hands of the prime minister as supreme commander and, within the limits of the directions he receives, the director general of the Defense Agency. The bureaucrats of the Defense Agency should no longer be a problem." In short, strategic planning and work on an emergency law system provided a golden opportunity for rapidly raising the position of the military in relation to the Defense Agency bureaus. This meant that as long as the Fukuda government continued that policy, the challenge to Japanese-style civilian control could not be ended just by Kurisu's dismissal.

Furthermore, cooperation with the American Government was creating a new pattern of pressure from the military being applied through the U.S. Government as an intermediary. Also, the spread of a concept of the Soviet threat brought about an increase in the number of military supporters in the LDP.

Thus, the defense policies under the Fukuda administration can be said to have brought about a reexamination of the previous system of civilian control and the need for a new concept. However, this awareness was almost nonexistent in the government and the LDP. Director General Kanemaru, in particular, labelled the statements of the military as being "the same as before the war" and only tried to stop them from making such statements. There was no attempt to build agreement or establish a concept of the role that should be taken by the military, as military specialists, in determining defense policy. Ironically, he took exactly the same line of argument as the opposition parties which do not recognize the Self Defense Forces. This policy has the danger of only adding to the doubts of the military and leading in the direction of allowing completely unrestricted influence to the military.

Thus, the problem of civilian control was left unsolved by Director General Kanemaru. Because of this, the criticism of the Defense Agency by the chiefs of staff of the Air, Ground, and Maritime Self Defense Forces continued after Kurisu's dismissal. "Kanemaru proclaimed everywhere that 'the emergency law system will stand on its own' and there was no end to the 'disturbance' until there was a change in personnel." Just before Kanemaru resigned as director general, a section manager in a Defense Agency bureau had the following comment. "Kanemaru did many things such as producing the guidelines for Japan-U.S. defense strategy. However, in the end, the director general said: 'I do not understand the Self Defense Forces any more.' The members of the Self Defense Forces now say they cannot get along well with us. Why is this?"

The greatest reason, in my opinion, is that Kanemaru did not directly accept Kurisu's proposal for reexamination of civilian control.

COPYRIGHT: Asahi Shimbunsha 1981

9651

CSO: 4105/24

23

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

ECONOMIC

MITSUBISHI BROADENS SCOPE OF DEALS WITH CHINA

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 4

[Text]

Mitsubishi Corp. has strengthened cooperative ties with so-called "friendly trading houses" exclusively engaged in trade with China.

It recently reached agreement with 15 such trading houses under which it will guarantee supply of commodities contracted for export to China which these friendly firms cannot procure on their own.

Sino-Japanese trade has slowed down recently due to China's economic adjustment program. Mitsubishi believes that it will be able to take part in more detailed transactions by joining with the friendly firms and this will serve mutually to expand trade deals.

Masaaki Enomoto, managing director of Mitsubishi, and the heads of the business divisions of the company met recently with the presidents of the 15 friendly firms which in the past engaged in transactions with Mitsubishi and reached an agreement on entering into cooperative ties.

Under the agreement, the friendly firms will actively secure orders from China even for commodities which they so far have not handled. Mitsubishi, on its part, will supply commodities for export to China when necessary and cooperate in transactions.

As a result of China's economic adjustments, large-scale deals, such as those for plant exports, are not being concluded, and trade has tapered off. Since China also is taking a policy of regional decentralization of power, the time has passed when business could be conducted simply by going to Beijing.

The friendly firms enjoy mobility. Many of them have clients in China's regional areas. One of their weak points, however, is that their business is specialized, which limits their transactions.

On the one hand, Mitsubishi and other general trading houses have finally embarked on expanding their branches in regional

areas of China. Even then, they are not able to take up detailed transactions as in the case of the friendly firms. The general trading houses, however, have the ability to cope with inquiries for all sorts of commodities, including transactions between third countries.

Mitsubishi thus decided to cooperate with the friendly firms to supplement each other's weaknesses and work for receipt of orders in a more effective manner as well as to expand transactions.

Large-scale transactions with China have disappeared. It thus can be said that the era of competition between the general trading houses and friendly firms has arrived, with the former tending to encroach on the rights of the latter.

The recent step taken by Mitsubishi is aimed at stemming the decline in trade with China by strengthening its cooperative ties with the friendly firms.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

ECONOMIC

MITI CALLED ON TO CONSOLIDATE VIEW ON MATERIALS SECTOR

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 16

[Interview with Haruo Suzuki, chairman of Showa Denko K.K., by Seiji Okada, industrial news editor of THE NIHON KEIZA SHIMBUN; date and place not specified]

[Text]

Haruo Suzuki, chairman of Showa Denko K.K., wants the Government to frame a clear policy regarding petrochemical and other so-called "materials industries" (which produce such basic materials as nonferrous metals and steel). His urge for a clear policy followed submission of an interim report by the Industrial Structure Council's chemical industry committee, led by another prominent economist, Hiromi Arisawa, to the Minister of International Trade & Industry. (See JEJ December 8 issue.)

The report advised MITI to draft a raw materials policy, including imports of naphtha, in light of the worldwide trend to make petrochemicals from natural gas (ethane). The pressure of imports was forecast to keep Japan's ethylene production at the present level of about 4.5 million tons in 1990.

Suzuki's views on the industry's problems were obtained by Seiji Okada, an industrial news editor of The Nihon Keizai Shimbun.

NKS: Japan will be unable to compete with the U.S. and Canada, which utilize inexpensive natural gas as raw material. The Japanese industry insists that it be allowed to freely import inexpensive naphtha. The interim report shows understanding of the problem but fails to come up with specific measures. Is the industry frustrated?

Suzuki: The recommendation shows that the ISC members know the direction to which we should head for. But it has not said a word about immediate implementation. The report is vague when it comes to the core, the most important

points. In other words, it is hard to practice (free feedstock imports). The members should investigate why it is difficult to practice the recommended imports. I want MITI to abandon its ambiguous stand.

NKS: MITI people held hot debates before the advices were submitted. But the Agency of Natural Resources & Energy, which controls the petroleum industry, won the arguments over the Basic Industries Bureau. I hear that the petrochemical industry laments about lack of their political influence.

Suzuki: I cannot mention any specific divisions at MITI.

But I think that MITI may do its business in two dimensions. The materials industries are important in terms of investment and employment size. MITI's top officials should consolidate ministry opinions into one now that the (Zenko) Suzuki cabinet has been reshuffled.

NKS: Not much can be expected of the Government for raw materials problem. So, it seems that the industry itself should try to improve its profitability and revise the production base suitable to slow growth of demand in the future. That requires improvement of the industry's behavior, such as

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

overcompetition.

Suzuki: Two or three leading producers in specific areas should be made responsible for all the producers' profitability. Our (Showa Denko's) tie-up with Mitsui Petrochemical Industries in medium- and low-pressure polyethylene is such an example.

NKS: *Will excessive capacity become a major problem?*

Suzuki: It is important to make production facilities muscular. It is desirable to abandon as much inefficient and obsolete capacity as possible so that the operating rates of modern, efficient plants can be raised. The industry must hurry to modernize its capacity. I painfully feel that we will go nowhere if we maintain the status quo, but we are not making thorough efforts.

NKS: *Overcompetition, in some people's view, stems from too many a company in the same area. The interim report said that "mergers are desirable" and advocated "consolidation that will form leading companies."*

Suzuki: Mergers are impossible even if companies go under. There will be no major mergers in the next two or three years. I believe that tie-ups in production and sales will be as effective or nearly effective as mergers. We should pursue tie-ups with understanding from the Fair Trade Commission. Tie-ups will be effective in recovering profitability.

NKS: *Formation of company groups and consolidation will require discussion by com-*

panies. Won't the discussion be regarded as a problem in light of the Anti-Monopoly act?

Suzuki: The present petrochemical industry situation is analogous to a sick person who does not have to be hospitalized but has to go to a hospital once or twice a week. Healthy persons may be exposed to free competition. But the industry's status satisfies 60-70 per cent of the conditions for cartel formation. It deserves a near-cartel. Given slow growth, MITI and FTC should not be antagonistic but form a consensus about what prescription is necessary. That will be a plus for the whole economy, too.

NKS: *Do you mean a mechanism with which therapy can be practiced openly departing from the pattern of MITI providing its administrative guidance and FTC trying to amend it?*

Suzuki: I mean that when poor men are talking together, a policeman does not need to stop by (and interfere).

NKS: *Can the petrochemical industry survive problems in Japan?*

Suzuki: Pessimism prevails, but I think it can survive. You cannot be sure that the raw material cost gaps with the U.S. and Canada will remain in the future, too. Even if imports grow to account for 20-30 per cent of the demand in Japan, you should be aware that the markets here are fairly large. Only domestic producers can satisfy the severe demand from users about product qualities and deliveries. Cost differences alone will not wipe out Japanese makers from the domestic markets. Excessive fears are not justified.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

ECONOMIC

HONDA, YUGOSLAV FIRM TO CONSTRUCT ENGINE-MAKING PLANT

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 7

[Text]

Honda Motor Co. will start producing general-purpose engines in Yugoslavia at the end of next year on a joint venture basis.

The Tokyo-based company recently obtained final go-ahead of the Federal Government of Yugoslavia to operate a joint venture enterprise, Mio Standard Tvoronica Motora Osijek, with an indigenous agricultural machinery maker, Metalska Industrija Standard Osijek.

The Yugoslav firm so far has been assembling Honda cultivators and pumps at an annual rate of 10,000 units.

The joint engine-making company will be capitalized at \$6 million (or approx. ¥1,300 million), of which Honda will put up about 16 per cent (or some ¥200 million) in the form of providing its manufacturing know-how.

The new company will construct a factory in Osijek,

the Republic of Croatia, where it will turn out Honda engines, G-150, G-200 and G-300, at an annual rate of 24,000 units in the first year and 30,000 in the following years.

Honda Motor will supply the Osijek plant with frames, transmissions and other major parts of engines. The ratio of local contents to total parts supplies will be raised to 70 to 80 per cent when the joint venture operations go on stream.

Yugoslavia will thus have an integrated cultivator producing setup in its country.

Meanwhile, Honda Motor has in mind a similar plan to provide its technological know-how to China in launching a joint motorcycle-making venture sometime in the near future.

The engine-making venture in Yugoslavia will prove an important test for its plan to provide skills and produce motorcycles in China.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

TECHNICAL COOPERATION AMONG JAPAN, U.S., EUROPE

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 pp 1,3

[Text]

In the midst of ongoing trade frictions, Japan, the United States and Western Europe have been stepping up technical exchanges in computer, semiconductor, robot and other high-technology fields recently.

Observers note in particular that Japan is taking the initiative in most trilateral exchanges which have taken the form of technological cooperation, joint venture, original equipment manufacturer (OEM) contracts and others. This indicates, they say, that despite continuing confrontation, a new era of trilateral technological cooperation with Japan as a pillar is emerging.

In heavy machinery and heavy electrical machinery fields where Japan used to import technology, there have been a number of Japan-initiated projects with the U.S. and West Europe recently. Kawasaki Heavy Industries, Ltd. has initiated joint development of a large coal-burning boiler with Deutsche Babcock & Wilcox AG of West Germany. Mitsui Engineering & Shipbuilding Co. has cooperated with Biphase Energy Systems of the U.S. in commercializing two-phase flow turbines applicable to geothermal and low-temperature power generation.

The typical technological exchange can be found in the

field of turbochargers — newly-developed equipment indispensable to improve combustion efficiency of engines for energy-saving in the future. Mitsubishi Heavy Industries, Ltd., the early starter in the field, offered technological assistance to General Electric Company of Britain recently, and at around the same time, Mitsui Engineering & Shipbuilding introduced technology from MAN-B&W Diesel GmbH of West Germany. And Ishikawajima-Harima Heavy Industries Co. has, in cooperation with Brown Boveri Co. of Switzerland, managed to commercialize turbochargers.

These exchanges have been more evident in Japan's leading fields of electronics and electromechanics. Fujitsu Ltd., which already has business tie-ups with Siemens AG of West Germany and Amdahl Corp. of the U.S., has recently concluded a contract to offer technology for large-scale computers and semiconductors to ICL Ltd. of Britain. And Nippon Telegraph & Telephone Public Corp. has also concluded a cross-licensing contract on patented technology of computers and electronic telephone exchange systems with International Business Machines Corp. of the U.S.

Furthermore, Yokogawa

Electric Works, Ltd. has signed an OEM contract to provide parts of ultrasound diagnostic equipment to General Electric Co. of the U.S. Similar contracts have been signed by TEAC Corp. to offer video disc players to Thomson-CSF of France and by Minolta Camera Co. to offer plain paper copiers to IBM of the U.S.

President Nihachiro Katayama of Mitsubishi Electric Corp. commented, "I have the impression that we have entered the era of equal partnership," when his company was being urged by Westinghouse Electric Corp. of the U.S. to cooperate in semiconductor and industrial robot fields, and even production technology and quality control skills.

More and more American and European firms are willing to introduce Japan's superb production and applied technology. Symbolic of this are moves in the field of large-scale integrated circuits where U.S. makers like Texas Instruments, Inc., Motorola, Inc. and Intel Corp. have plans to expand its Japanese subsidiaries. Toshio Kodaka, president of Tokyo Electron Ltd. which used to import and sell semiconductor production equipment from the U.S., but is today increasingly handling Japanese products, said, "Domestic users

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

no longer buy our products unless they are made in Japan."

Although the U.S. and West Europe increasingly praise Japanese production and applied technology, a great many Japanese managers believe Japan is still inferior to the West in basic technology. For example, Tokyo Electric Power Co., a user of boiling water-type nuclear reactors, has started studying a plan to introduce pressurized water-type reactors in an attempt to diversify reactors, but Japanese makers like Toshiba Corp., Hitachi, Ltd., and Fuji Electric Co. were forced to dispatch their engineers to Kraftwerk Union AG of West Germany to be briefed on pressurized water-type reactors.

Thus, it is an urgent matter for Japan to overcome such "comparative inferiority" and to that end, induction of western technology will continue in the years to come. It is true that technology exchange must be based on swapping superior technology, but the important thing is understood to be to see to it technology offered contributes to industrial promotion of the other side. Noboru Yoshii, senior adviser of Sony Corp. who participated in the recent conference of the Japan-Britain Electronics Council, said, "We have been successful in offering technology of home appliances to West Europe, but we must think of technical transfer, which will take root in the West."

Recent Partnerships among Japanese, American and European Enterprises

(Including cases under negotiation)

- Establishment of a venture to produce video tape recorder systems among Victor Company of Japan Ltd. (JVC), Thorn EMI Ltd. of Britain and Telefunken of West Germany
- Establishment of a joint VTR manufacturing company between Matsushita Electric Industrial Co. and Robert Bosch GmbH of West Germany
- Joint development of new boiling water-type atomic reactors among Toshiba Corp., Hitachi, Ltd., Tokyo Electric Power Co. and General Electric Co. of the U.S.
- Joint development of new pressurized water type atomic reactors among Westinghouse Electric Corp. of the U.S., Mitsubishi Heavy Industries, Ltd. and some other Japanese companies
- Joint development of jet aircraft engines among Rolls Royce Ltd. of Britain, Ishikawajima Harima Heavy Industries Co., Kawasaki Heavy Industries, Ltd. and Mitsubishi Heavy Industries, Ltd. (XJB project)
- Joint development of Japan's next generation civil aircraft among Mitsubishi Heavy Industries, Kawasaki Heavy Industries, Fuji Heavy Industries, Ltd. and leading American aircraft makers (YXX project)
- Joint development of coal burning boilers between Kawasaki Heavy Industries and Deutsche Babcock & Wilcox AG of West Germany
- Cooperation between Mitsu Engineering & Shipbuilding Co. and Biphase Energy Systems of the U.S. to commercialize two phase flow turbines
- Information exchange on single unit video camera/VTR units among Eastman Kodak Co. of the U.S., Sony Corp., Hitachi, Ltd., Matsushita Electric Industrial and some others
- Establishment of a joint venture to produce "mini-fax" facsimile equipment between Matsushita Graphic Communication Systems, Inc. and the British Government
- Exchange of patented technology on computers, semiconductors and electronic telephone exchange systems between Nippon Telegraph & Telephone Public Corp. and International Business Machines Corp. of the U.S.
- Joint development of turbochargers for vessels between Ishikawajima Harima Heavy Industries and Brown Boveri Co. of Switzerland
- Licensing of industrial robot manufacturing technology by Fujitsu Fanuc Ltd. to GEC Group Limited of Britain and others
- Licensing of lighting and airconditioning controlling technique by Matsushita Electric Works, Ltd. to Brown Boveri & Cie. AG of West Germany
- Licensing of logic circuit technology by Toshiba to LSI Logic of the U.S.
- Licensing of industrial robot and semiconductor manufacturing technology by Hitachi to General Electric Co. of the U.S.
- Licensing of lithium battery manufacturing technique by Matsushita Electric Industrial to Ray O-Vac of the U.S.
- Licensing of optical character reader technique by Nippon Electric Co. to Burroughs Corp. of the U.S.
- Licensing of large scale computer and semiconductor technology by Fujitsu Limited to ICL Ltd. of Britain
- Licensing of vessel-use turbo charger technique by Mitsubishi Heavy Industries to General Electric Company of Britain

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

COMPANIES PIN HOPES ON NEW PRODUCTS, TECHNOLOGY

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81, p 4

[Text]

Development of new products and technologies is the foremost aim of leading companies in considering what they should do about their future management.

This was disclosed recently in the yearly survey on managerial aims carried out by the Japan Management Association in October. It directed its checkup at 500 companies listed on stock exchanges.

Responses obtained from 191 of them showed that 92 per cent thought that development of new products-technologies was the most important. This was as in the case of last year's survey.

The answer indicated that enterprises operating in an era of stable growth were most concerned about developing new products-technologies so that they would not be left behind in the current tide of technological innovations.

Next most important goal was "elevating market share" such replies reaching 37 per

cent. Thirty-five per cent cited raising the productivity of their directly concerned field of work.

The association also queried the companies on their main operations, using the product portfolio management (PPM) method to ascertain their present-future possibilities.

As to this, 26 per cent said they were a "problem child" business (in a growing industry but with a small share) and 11 per cent said they were a "beaten dog business" (in a low growth industry with a little share). In other words, one-third of the respondents felt that the direction of their business in the future was in need of a review.

This revealed that these firms felt the urgency of developing new products and technologies for replacing their main business phases.

On the other hand, only 35 per cent of the companies surveyed were found to be systematically

grappling with the problem of elevating office productivity, in which interest lately has been growing.

The association also probed into such aspects as personnel-education, production, research-development and marketing.

This bared that as to personnel-education, the problem of devising measures for "vitalizing young and middle age employees" had risen to the top level; two-thirds of the companies recognized that the life-cycle of products had diminished; 45 per cent of the companies had started small group activities, such as quality control (QC) circles, in the marketing area.

Note: PPM is a managerial means to gauge product composition by taking into consideration the smallness or largeness of the market share of a product and the smallness or largeness of its growth.

COPYRIGHT: 1981, the Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

JIRA ASKED TO PARTICIPATE IN USSR ROBOT SHOW

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 8

[Text]

The Soviet Government, scheduled to open an international industrial robot exhibition in Leningrad for a 10-day showing beginning October 18, next year, has called on the Japan Industrial Robot Association to join it.

JIRA members, numbering 36, appear willing to take part in the proposed show as they expect it will lead to cultivating fresh demand for their products.

In inviting Japanese robot makers to Leningrad, the Kremlin has presented a list of specific items they want the Japanese to display. They include manual manipulators, computer-aided designing systems, flexible manufacturing systems, related parts and components, jig machines, and almost all kinds of industrial robots.

The semi-governmental Japan External Trade Organization will act as a channel for Japanese robot makers to participate in the Soviet exhibition.

The Soviet Union, noting that Japan possesses 70 per cent of the world's total robots, originally envisioned holding an exhibition of solely Japan-built robots in Moscow. The Kremlin, however, has given it up in favor of an international show in Leningrad.

Aside from such a show, the Soviet Union has been approaching Mitsubishi Heavy Industries, Ltd. to tie up on robot-making skills. So far, only Kawasaki Heavy Industries, Ltd. has sold a number of robots to a Soviet auto plant, with others making several contracts for exporting a few products in small lots.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

NUCLEAR POWERPLANT CONSTRUCTION REVIVES

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 5

[Text]

Nuclear power plant construction, stalled so far this year, is moving ahead again.

Chubu Electric Power Co. is scheduled to start building its third atomic energy plant with a generating capacity of 1.1 million kilowatts at Hamaoka in March, 1982. Japan Atomic Power Co. plans to start a similarly large (1.16 million kilowatts) at Tsuruga once it solves the problems with a radioactive waste leakage into seawaters.

The problem involved a smaller plant at Tsuruga. The Government's Electric Power Source Coordination Council is likely to approve construction plans totaling in generating capacity more than 4 million kilowatts, including a project of Tohoku Electric Power Co. for a 825,000-kilowatt plant at Maki.

The nuclear projects were stalled after the accident at the Three Mile Island station in the U.S. in March, 1979. Projects were revived in August, 1980, when the Ministry of International Trade & Industry allowed two utilities — Tokyo and Kansai Electric Power Companies — to construct two each reactors at Fukushima and Takahama. Then, the utilities here were hit by the Tsuruga leakage problems, which MITI discovered in April this year.

The utility industry feared that the problems would cause nuclear projects to be delayed

one or two years. But the latest MITI action for Chubu Electric Power indicated that the Government and utilities suffered only about six months of delays.

Japan Atomic Power was originally scheduled to start construction of its large plant (Tsuruga-2) in June. But the leakage caused MITI to refrain from issuing its construction approval in light of the Tsuruga-1 problem. The smaller reactor will remain suspended until December 17 by the ministry's order.

Meantime, Hokuriku Electric Power Co. is trying to blueprint its nuclear project, including a 540,000-kilowatt plant at Noto Peninsula. This project, however, is unlikely to progress fast enough to seek the EPSCC's approval in fiscal 1982. Hokuriku, Kansai and Chubu are considering a joint nuclear project for a large (10 million kilowatt) nuclear complex also on the peninsula. But Hokuriku has not submitted its joint plan to local governments because of the affects the Tsuruga problem has.

Elsewhere, the projects are going on relatively smoothly. Utilities plan to propose six projects in the MITI-sponsored public hearings and EPSCC meetings in the rest of fiscal 1981. The largest plans are the two 1.18 million kilowatt plants considered by Kyushu Electric Power Co.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

32

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

TWO UNDERWATER STEEL-CUTTING TECHNOLOGIES

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 17

[Text]

The world's first two arc electric discharge methods for cutting underwater for the safest disposal of radioactive steel structures, developed by last February by a Japanese governmental laboratory, have become applicable to modern commercial nuclear station pressure vessels, it was recently learned.

According to the Government Industrial Research Institute, Shikoku, Takamatsu of the Ministry of International Trade & Industry's Agency of Industrial Science and Technology, one of its two methods of cutting stainless-clad steel structures into smaller pieces has been developed to a higher capacity of severing up to 300-millimeter-thick steel plates or bars. The capacity thus has been doubled compared with the original one announced last February.

The two methods, respectively for cutting stainless steel and stainless-covered steel, feature an underwater arc type of electric discharge like welding, for efficiently severing stainless steel and in the case of stainless-clad steel, the combined application of that electric arc discharge process for cutting through stainless steel and a gas torch for severing steel under the

stainless covering. The gas torch process had already been developed in America for commercial application. Japan's own methods feature minimized underwater generation of radioactive gas.

As the institute explained, the gas torch it has used for the steel part of the stainless-covered steel structures of the N-plant pressure vessels has reached the new high capacity through such improvements as: 1) Enlargement of the torch diameter from 20 to 30 millimeters; 2) Expansion of the oxygen blow mouth diameter from between 1.9 and 2.3 to 2.9 and 3.2 millimeters; 3) Use of the conventional propane gas mixed with a 30 per cent methyl-acetylene gas as the main flame; and 4) Switching of a "pressurized water curtain" applied to both the arc discharge cutting and the gas torch cutting to an "air pressure curtain" in the case of the gas torch to eliminate water seepage.

But the whole severance equipment did not have to be as enlarged as anticipated. The new capacity is more than enough for cutting off the existing commercial N-plant pressure vessel steel of 250 millimeters in thickness.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

JAPAN STILL IMPORTS MORE TECHNOLOGY THAN IT EXPORTS

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 17

[Text]

Japan's annual balance of technology imports and exports still registers a big excess of imports despite the recent sharp growth in Japan's technology exports.

The Science and Technology Agency revealed recently that technology imports in fiscal 1980 ended last March, in terms of royalty and other compensation payments on a dollar base, totaled \$1,439 million, 14.2 per cent up from the preceding fiscal year.

Technology exports during fiscal 1980 totaled \$378 million, 10.5 per cent up. Both annual increases indicated a continued brisk interchange of technologies.

Apart from the compensation payment value which include continued annual payments from the past, 2,142 new technology importing contracts were concluded during the year, an increase of 26 (or 1.2 per cent) over the year before.

By category, machine technologies comprised the largest number of the fiscal 1980 import contracts. Electric-electronic, chemical, and metallurgical technologies followed in that order.

The predominance of machine and electric-electronic technologies clearly reflected Japan's recently-mounting imports of American and West European technologies concerning the development of new types of nuclear electric power plants, large thermal-steam electric power plant boilers, other heavy-duty machinery, and computer-related equipment.

Computer-related technologies numbered 190 contracts, up 26 or 15.9 per cent from the preceding year, with the U.S. accounting for about half, and France, West Germany, and Britain coming thereafter in that order.

Technology exports' rate to technology imports, in value percentage terms, had been steadily rising with slight breaks from 20.4 per cent in fiscal 1976 to 22.7 in fiscal 1977; 22.1 in fiscal 1978; 27.1 in fiscal 1979; and 26.3 in fiscal 1980. Small slipbacks are considered due to technical payment timing arrangements, and the Agency believed, Japan's exports are basically on an uptrend.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

SMALL METAL PARTICLES USED FOR PRODUCTION OF CARBON FIBER

Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81, p 17

[Text]

An innovational method to produce carbon fiber with use of minute metal particles has been developed by Prof. Tsuneo Koyama, Assistant Professor Morinobu Endo and their team at the Shinshu University Engineering Faculty.

It features low cost and high efficiency.

According to Endo, employment of extremely fine metal particles is without precedent anywhere and has drawn many joint study proposals from abroad, such as from the National Aeronautics and Space Administration, Massachusetts Institute of Technology, and other American and French research institutions.

But, the research team has chosen Showa Denko K.K., a leading Japanese chemical maker, as its joint research partner for refinement of the method into a commercially

applicable form, he said.

The team introduced the method at an eighth congress of the Carbon Society of Japan held early December.

Endo called the new method "Gas Phase Growth Carbon Fiber" production process. It consists in sprinkling very fine particles of some metal (believed to be iron) on a metal board inside an electric furnace, heated up to 1,000 degrees C. or a higher, and then, blowing a mixed gas of benzene and hydrogen into the furnace.

These simple operations quickly result in the formation of bars of carbon fiber like cotton candy, with each bar tip centering on a metal particle.

Carbon fiber, for its outstanding heat and strain resistance, recently has come to be widely applied to aerospace engineering.

So far, there had been only two varieties — a very expen-

sive high-grade type of a PAN (polyacrylonitrile) group and a cheap and low-grade type of a pitch group.

The new innovational method promises production of a better kind of carbon fiber than both of the conventional products in tensile strength. Besides, its utilization of benzene and simplicity of working suggest the possibility of a much lower production cost in mass production.

Showa Denko's Vice President Taijiro Oga saw many possibilities of application of the carbon fiber produced by the new method to electronic and metallurgical areas, considering its high heat conductivity.

COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.

CSO: 4120/94

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

BRIEFS

AUSTRALIAN URANIUM ENRICHMENT--Both the Government and nuclear industry in Japan have decided to try to join an international uranium enrichment project planned by Uranium Enrichment Group of Australia. Top executives of UEGA visited Japan to consult with officials at the Ministry of International Trade & Industry, electric utilities and other nuclear companies. The visitors were told that Japan deems it necessary to further strengthen the nuclear relations between the two countries for Japan's long-term interest in securing uranium. Besides, Japanese participation seemed to promise a large volume exports of centrifuge machines that are required to build an enrichment plant. UEGA plans to start enrichment in Australia with funding and technical cooperation from, among others, the U.S. and France. Japan is being urged to join because of the Group's evaluation of high-level technical expertise in Japan. Specifically, UEGA plans to complete a plant with annual capacity of 1,000 tons by the end of the 1980s. The eventual capacity is envisaged to total 3,000-5,000 tons a year. To realize the project, Australia is scheduled to select partners to handle the technical requirement by March, 1982. The UEGA project has attracted attention of nuclear leaders in Japan, the U.S. and Europe because it represents the first case of major multinational cooperation in the nuclear field. [Text] [Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 5] [COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.]

AUTOMATED CAR PAINTING--Toyo Kogyo Co. will be the first of major Japanese automakers to fully automate car body painting. The Mazda car maker said its Hofu, Yamaguchi Prefecture plant, now under construction and due to start up next fall, will have fully unmanned body painting lines. Toyo plans to use 200 industrial robots at its factories in Japan. Of that, 140 robots will be installed at the new Hofu factory. Painting robots will account for 22. The company will buy the 22 from Tokico, Ltd., a painting robot maker, early next year and complete trial lines of painting robots in June. After repeating test runs, the company hopes to entirely automate painting lines at Hofu next autumn. The Hofu factory, when completed next fall, will have a monthly 20,000 cars producing capacity. The 140 robots at Hofu will supplant 1,800 workers, half the number now employed at existing factories of the same capacity. Toyo intends to apply the full automation system to the painting lines at all of its factories if the attempt at Hofu proves a success. Leading automakers in Japan as well as abroad, already having installed welding robots, now are going up one step further--robotization of the painting process. [Text] [Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 7] [COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.]

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

MACHINE TOOL ORDERS DOWN--The Japan Machine Tool Builders' Association said that orders received by its 68 member companies in October totaled ¥50,215 million, down 9.7 percent from a month earlier and down 3.7 percent from the same 1980 month. Tools equipped with numerical control devices accounted for ¥25,696 million 15.0 percent from September and down 1.2 percent from the year-earlier level. Order backlogs at the end of October stood at ¥317,514 million, up 1.6 percent from a month earlier and up 3.1 percent from a year earlier. January-October orders aggregated ¥517,825 million, up 1.5 percent from the comparable 1980 period. NC machine tools accounted for ¥272,018 million, up 7.5 percent. A JMTBA spokesman said that orders in all of 1981 will go almost crabwise from a year earlier at some ¥620,000 million if the situation remains as it now is. [Text] [Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81] [COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.]

SEMI-FINISHED IC CHIP EXPORTS--Japan's exports of semi-finished integrated circuit chips have been surging recently, apparently mirroring establishment of more assembly plants in the U.S. and Europe. According to the Electronic Industries Association of Japan, their exports in the first nine months of this year totaled ¥27,795 million, up 23.4 percent from the year-before level. This sharply contrasts with poor exports of encased ICs (finished products). Their exports dropped 2.1 percent during the same period. Export of IC chips are expected to further increase in the future when Nippon Electric Co. and Hitachi, Ltd. begin assembly of 64-kilobit random access memory (RAM) chips at their plants in the U.S. [Text] [Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81] [COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.]

CARBON FIBER PLANT--Carbon fiber projects have been drafted by Mitsubishi Chemical Industries, Ltd. MCI plans to start its production by completing a large plant with annual capacity of 1,000 tons by sometime in 1984. In the unique Mitsubishi process, coaltar--a byproduct of coke--will be utilized as a raw material. Compared to polyacrylonitrile carbon fibers (as produced by Toray Industries Inc.), the MCI know-how is claimed to promise cutting production steps, thus contributing to lower production costs. The plan reflects the company's intention to make best use of byproducts from its coke operation. Earlier, MCI developed the so-called needle coke which can be used as a raw material of electrodes in electric furnaces. The developer started joint studies with users to develop applications of the coke shaped like a needle. The carbon fiber plant will be located at either Kurosaki in north Kyushu or Sakaide on Shikoku island. Meanwhile, Toray, the largest producer in the world, and Mitsui Coke Co. agreed to build a pilot plant for carbon fiber production from solvent refined coal at Omuta, also Kyushu, by mid-1983. Their joint venture, C.M.T. Development Co., is capitalized at ¥200 million. The two firms intend to make the coal-derived grades for use in automobiles. Toray's PAN fibers are mainly consumed for manufacture of aircraft components. [Text] [Tokyo JAPAN ECONOMIC JOURNAL in English Vol 19, No 985, 15 Dec 81 p 16] [COPYRIGHT: 1981, The Nihon Keizai Shimbun, Inc.]

CSO: 4120/94

END

FOR OFFICIAL USE ONLY