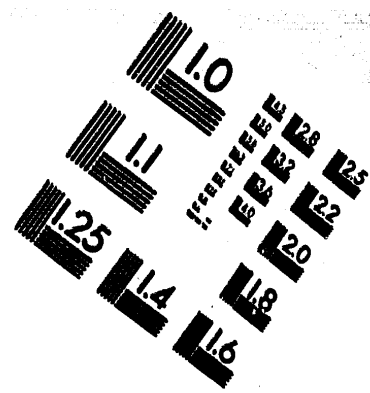
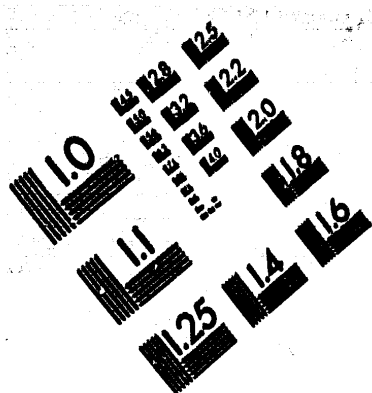


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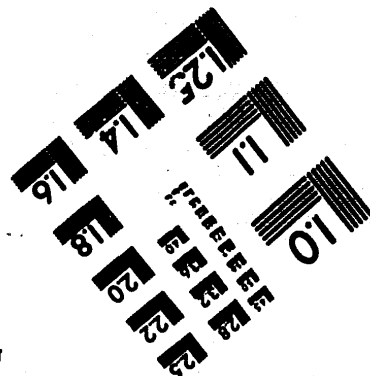
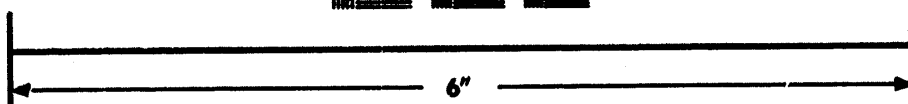
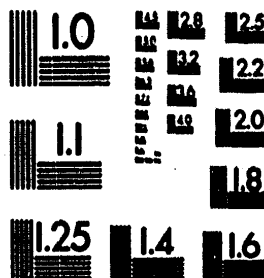
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POLITICAL AND SOCIOLOGICAL

'CHUO KORON' ANALYZES OHIRA AS NEW PRIME MINISTER

Tokyo CHUO KORON in Japanese Jan 79 pp 140-149

[Article by Kenzo Uchida, political analyst]

[Text] The producer in the Ikeda cabinet, which coined the catch phrase "tolerance and patience," has since been known as the number two man. Now that he has assumed the prime ministership, his true potential is in doubt.

The Reader Politician

Among politicians today, Masayoshi Ohira is a rare reader of books. I point this out first in trying to profile the new prime minister. Ohira himself has said "no matter how busy I am, I always try to stop at a nearby bookstore at least once or twice a week, and usually I end up buying two or three books to take home. The aroma of new books and their softness to the touch give me great pleasure. This is the instant when I appreciate the joy of living."

He has not changed today. On 29 November, Ohira slipped into a bookstore and bought four or five books. What differs now is that Ohira, whose election to the prime minister's post is assured, now has an entourage of "Ohira watcher" reporters following him around, causing him to unconsciously sigh, "I guess I can no longer browse without care in a bookstore."

Ohira has been extremely busy the past several years as foreign minister in the Tanaka cabinet, finance minister in the Miki cabinet, and secretary general of the party in the Fukuda administration, but his passion to read has not abated. After political reporters ceased their night beat, Ohira would be enjoyable reading at his quiet private residence in Seta, Tokyo. He would be relaxed in Japanese garb in his Western style room, sitting on the rug and immersed in reading, a scene which I have encountered many times.

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Politicians today have completely given up on book reading. Their time is occupied with entertaining petitioners, travel to and from their electoral districts, evening banquets, and whatever slight learning they pick up by ear. Have not most of the past succession of prime ministers been this way? This wasn't the situation immediately after World War II. Tetsu Katayama was a practicing lawyer, who also authored a book on appreciation of Pai Lao-t'ien's poetry, while Hitoshi Ashida was known for his work on the diplomatic history of World War II. Shigeru Yoshida was known to be an ardent secret reader of Kodo Nomura's detective stories, and his wealth of anecdotes and abundant humor can only stem from such reading. The fact that Ichiro Hatoyama was also a good book reader is clear from reading his memoirs. As for Tanzan Ishibashi, he left a monumental 15-volume work on Japan's political history.

However, with the three-generation, bureaucratic political era represented by Shinsuke Kishi, Hayato Ikeda, and Eisaku Sato, it seems that we no longer have any readers, not to mention writers. I remember a well-known veteran journalist, who knew these prime ministers well around that time, lamenting to me that prime ministers nowadays only read the newspapers and government documents."

Then how did so many book readers happen to come together under Prime Minister Ikeda, who himself was always stressing statistical data and figures? One might mention Shigesaburo Maeo, the senior member of the Ikeda clan, who was known as the best book collector in political circles and also renowned as an essayist with a book on study of the signs of the zodiac, Shunji Shiomi donated the Shiomi literary collection to his home prefecture, Kochi. Furthermore, the three musketeers under Ikeda, namely Ohira, Yasuyoshi Kurogane, and Kiichi Miyazawa, are all well-known in political circles as book readers.

Some people may think it an odd question to ask whether being a book reader is of any advantage to a politician. One would probably meet with a cynical response that "culture is an impediment" in present-day politics, where forceful action is respected. Or in an era of a headlong rush towards a managed society, where data and figures are all-important, such play with abstract concepts would be deemed unnecessary.

We note that the decades starting with 1955 and 1965, from Kishi to Kakuei Tanaka, were a period of high economic growth, when the Japanese pursued material goals and they could live with the dream of a great economic empire. However, Japan in the oil-shock decade starting in 1975 is in a period of confusion and searching. Ohira reportedly has recently read several of Galbraith's books, and one can assume that the explosive boom generated by the translated words of "The Age of Uncertainty" reflect some of this confusion and searching. It seems that for the same reasons, Takeo Miki and Fukuda, the political leaders following Tanaka, were compelled to make some spiritual appeal to the people. As during the time of confusion following World War II, is it not again the time when some type of thinking or historical perspective is desired of our leaders? It is at such a time

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that we see the "reader Ohira" making his appearance on stage. Ohira himself admits that "I find myself stopping in front of the bookshelves labeled history, society, essays, and such subjects rather than politics, economics, and law." If his range of reading really covers these areas, it only proves that his reading makes him a student of this history of old and new, and East and West. In this transition period of continued searching, we should have great expectations of a politician who thinks in the framework of history. For this reason, I have elected to point out that this is a rare appearance of a book-reading prime minister on stage.

Famous Director of Ikeda Politics

All during the prime minister election, Ohira became teasingly well-known as the "ahs-and-uhs Ohira." Undoubtedly Ohira's utterances are at times totally obscure, giving the impression that he is inexplicit in words and action. However, if one troubles to read transcripts of his talks, speeches, or responses to the Diet, one notices that the text is surprisingly clear and to the point. The "ahs" and "uhs" in oratory only seem to be the birth-pains of a search for the right words.

The previous prime minister, Fukuda, left a reputation as a master of coined words such as "Showa-Genroku" and "rampaging commodity prices," but Ohira has the patent on his own coinage of "tolerance and patience" for the annals of Japanese political history.

According to Kiotsu Shiomi's book "Listening to Hayato Ikeda," Ikeda was advised during his visit to the United States about "patience and tolerance" by then Secretary of the Treasury Schneider. At a meeting at Ikeda's Shinanomachi residence with Ohira, Miyazawa, and others to discuss a motto for the new political party in office, Ohira suggested the use of "kanyo" (tolerance) and "shinbo" (perseverance), and there the matter ended. Ikeda later approved the suggestion, but suggested that Ohira not be told so as not to inflate his ego. The word "shinbo" was also thought not to have enough class and was changed to "nintai" (patience, perseverance).

This is an episode on the eve of the Ikeda cabinet in 1960. It is a historical scene, bringing back vividly the atmosphere of the Ikeda clan at that time.

Ohira, who was originally a common bureaucrat in the Ministry of Finance, established his political ties beginning with the post of secretary to Minister of Finance Juichi Tsushima on two occasions just before and after the end of World War II. This was followed by the post of secretary to Minister of Finance Ikeda in the third Yoshida cabinet in 1949. His political connections, particularly that with Ikeda which led to his election to the Lower House in October 1952, marked the beginning of his political career.

What brought politician Ohira suddenly into the limelight was his appointment as director of the prime minister's secretariat in the Ikeda cabinet in

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July 1960. In the turmoil surrounding the Mutual Security Treaty issue in 1960, Ikeda's politics, which were responsible for changing the direction of conservative politics from power rule to management, from frontal attack to flanking, from confrontation to consultation, and from high to low posture, marked a major turning point in postwar political history, which has been evaluated and a consensus reached.

The shift from a position of confrontation on the security past to a policy of high growth, and the change from political to economic priorities, allowed conservative rule to avoid a crisis, and this furthermore resulted in the long-term prosperity during the 1960's and into the 1970's. Although the ship's captain was undoubtedly Hayato Ikeda, the helmsmen were the secretariat trio of Ohira, Kurogane, and Miyazawa, led by Maeo, and also Shosuke Ito, better known by the nickname "bu-chan." Ohira, who was in the middle of the low posture politics of "tolerance and patience," was not simply a head clerk in the cabinet, but actually a distinguished director of Ikeda politics.

How can we tell whether being director of the secretariat of the prime minister's office and an efficient aide were good for Ohira? The reputation that he is always the exemplary supporting actor, the deputy, the chief of staff, and at best the number two man seems to follow his around. For instance, foreign minister in the Ikeda cabinet, director of political coordination for the party and minister of international trade and industry during the Sato administration, foreign minister and finance minister in the Tanaka cabinet, finance minister in Miki's cabinet, and finally party chairman in the Fukuda administration.

One particularly remembers the strong impression left by the Tanaka-Ohira duo, which accomplished normalization of Sino-Japanese relations, further establishing the image of Ohira as always following Tanaka around.

Friendship With Kakuei Tanaka

There is no stranger pair than that of Ohira and Tanaka. Ohira is known to be a careful, deep thinker while Tanaka is impatient and decisive. One can see Tanaka "thinking on the run" while Ohira would be slow moving to the point where he wouldn't "cross a bridge even after it was checked for solidarity." One recalls a characterization by Tomomutsu Ono, who wielded power as party vice president in the days of the Ikeda administration, that "Maeo has superior talent and knowledge, Kiichi Aichi is well-learned, Kakuei Tanaka is an extraordinary genius." Ohira likes to portray himself as an ordinary man with honesty as his motto. In an epitaph written for a senior alumnus, Saburo Koda, Ohira made use of the interesting expression "Koda was not an ordinary fellow, but I'm just a simple man." Even if old man Tomomutsu were to scold him "you have no talent," Ohira would probably just barely smile.

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Ohira and Tanaka reportedly became acquainted soon after Ohira's first election victory. Ohira recalls Tanaka as being "very high spirited, fast thinking, and a fast worker." Hayato Ikeda and Eisaku Sato were Shigeru Yoshida's two lieutenants. Ohira became Ikeda's right arm, while Tanaka became Sato's vassal. During the decade following 1955, in the world of a cooperation-opposition and love-hate relationship between Ikeda and Sato, the two pillars in the history of the Liberal Democratic Party (LDP), the friendship between Ohira and Tanaka grew deeper. It seems that such extreme opposites in political disposition found stimulation in complementing each other, and this eventually tied them together. In the personnel shuffle of July 1962, the on-stage appearance of the Ohira, foreign minister-Tanaka, finance minister combination, which replaced other stalwarts in the cabinet, startled the public. Fifteen years have passed since then. Ohira has publically never wavered in his personal friendship for Tanaka even during the latter's resignation in 1974 as a result of a money and politics scandal or his arrest in the Lockheed case in 1976. As an individual, this may represent honesty and be a virtue, but he is a public figure and currently prime minister. The Lockheed trial with Tanaka as the defendant is proceeding on schedule in the Ohira administration, and this is where a major problem for Ohira may exist.

All of Japan's mass media have been raising cries of warning and are closely watching developments, while the public has also been showing extraordinary interest in the issue. Despite the fault of repetition, I can only reiterate the gravity of the matter, since public trust in the Ohira administration rests on this single point. Although this may come as a surprise to Ohira, there is already the gossip and speculation being circulated in political circles that "Ohira is too careful and lacking in decisiveness. Aren't major national issues really being settled by a summary telephone call from Majiro (Tanaka's residence)?"

Repeating again, the future of the Ohira administration depends on Ohira escaping Tanaka's shadow.

A convincing argument for the Tanaka administration theory is that the capability for action and the vote-gathering operations of the so-called Tanaka Army Group played a deterministic role in the prime minister primary election. Is this true? Let us quote a few of the arguments.

One cannot deny that, not the general public, but the extraordinary capability for action of the Tanaka Army Group, a type of professional collective with a vote-getting operation turned on 1.5 million party members, had an enormous effect. It can also be pointed out that the plurality of 110 points and winning 550,000 votes far exceeded the strategy expectations of the Ohira-Tanaka camp. This kind of landslide can only mean that there was some change in the consciousness of party members or the public beyond that producible by vote-getting tactics, good or bad, which, however, happened to work in Ohira's favor.

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What was this change? Strategically speaking, this was partly due to poor thinking and tactical errors by the Fukuda camp. Early in the primaries, the hawkish posture of Kakasone promoting emergency legislation and his views on modifying the constitution appealed to the far right-wing members of the party, and this led to persistent rumors that his popularity was on the rise. Hoping to turn this mood to his advantage, Fukuda adopted a forceful high profile posture with repeated hollow attempts at self-promotion such as "support for Fukuda is rising from all corners of the country," or "who can handle the Tokyo summit? The world wants Fukuda!" Without paying any attention to Takeo Miki's caution about "speaking too loudly," these utterances must have not only brought resentment but also must have had some influence on the voting by party members.

Compared to the shrill Fukuda, Ohira campaigned throughout at his own pace. Ohira kept repeating in subdued tones that "one resorts to force as a last measure. I believe in a politics of harmony, striving while humbly reflecting, trying to reach an understanding in good faith." One prevalent appraisal of the two candidates for the prime ministership was "the Fukuda of accomplishments, the Ohira of personality," but this eventually changed to "the arrogant Fukuda, the undependable Ohira." Fukuda, with his high posture boasting of his accomplishments, appeared arrogant and generated antagonism, while Ohira, with his constant down-to-earth low posture, seems to have generated support and sympathy such as that normally accorded a judge.

There is also some harsh criticism such as "that's Ohira's style, but behind the apparent low posture, there lies a crafty calculating mind." I previously mentioned the solidarity of the Ikeda clan some years ago. The death of boss Ikeda in 1965 was followed by a tumultuous confrontation of internal factions. The senior member Maeo inherited the Hiroike-kai Ikeda faction, but this resulted near the end of 1970 in a more serious confrontation between a younger group within the faction demanding transfer of power to Ohira and the old-boy group desiring to protect Maeo. Colleagues Kurogane and Miyazawa, known as members of the secretariat trio, supported Maeo, while Ito, with a journalism background, supported Ohira. Eventually, in the spring of 1971, Maeo resigned the chairmanship of the Hiroike-kai in favor of Ohira, and this prevented a split of the group left by Ikeda. The spasms from this experience have not altogether vanished, even after 7 or 8 years. The fact that Maeo, who later became a distinguished leader of the Lower House and a party elder, maintained a bystander attitude throughout the present prime minister election, even though it was a campaign for Ohira, almost like a younger brother, seems to show that hard feelings do not die easily. It cannot be honestly said that Ohira can completely disregard the ill-feelings surrounding his relationship with Maeo.

In retrospect, no politician, especially one who aims for the prime minister's post, can survive by being gentle, sincere, and likeable. Ohira's boldness and tenacity, once he makes up his mind, can be observed first when he

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inherited the Ikeda faction from Maeo and later in the current political struggle against Fukuda. From this viewpoint, perhaps he is too retiring, while Fukuda is too outspoken and lacking in tenacity. Fukuda's announcement on the eve of 17 November of dropping out of the race is typically Fukuda.

Enough about personalities and strategies, and let us return to the main problem of party member consciousness. Speaking of introduction of the primary election system and its actual administration, it could easily be criticized as still being simply backroom-faction-money politics now practiced on a national scale, or that party members and sympathizers constitute a special professional collective. Nevertheless, none can deny that the general election involving the LDP has been liberalized and is one step closer to becoming that of the people. There is much more significance in an election involving 1.5 million voters than in one involving some 400 party members in both houses of the Diet. There still remain questions and room for improvement regarding party membership registration and the system of vote point allocation, but one should note that party members are at the same time the public. Therefore, the party members and the results of the public vote seem to reflect to some degree the fine variations in the national consciousness. This seems to be more specifically reflected in the response to the confrontation between Ohira and Nakasone on the issue of the principle of emergency legislation.

Nakasone's vociferous advocacy of the theory of emergency legislation has the appearance of an exciting preliminary skirmish before the primary election, and various surveys were used to show that it was popular with the rank and file of the LDP. This was used to prove that right-wing resiliency in the LDP was strongly rooted, a favorable comparison to the strength of left-wing resiliency in the Socialist Party.

At about this time, Ohira deftly made known his own critical views on the highly-touted emergency legislation theory. "The present Self-Defense Force Act represents carefully enacted emergency legislation whereby the prime minister can order self-defense force mobilization in case of imminent attack and obtain Diet approval later. In other words, we already have the mechanism to deal with an emergency (15 October speech). Also, "existing laws should be constantly reviewed, and, as necessary, the Diet can be asked for a decision. I do not believe that Japan's security is at present fragile as an eggshell, such that the issue of emergency legislation must be considered immediately" (Kyodo News Service interview, 14 November).

A statement such as this in the atmosphere of a prime minister election is quite an act of courage. I am not simply saying that this emergency legislation argument between Ohira and Nakasone was a powerful factor in Ohira's victory over the Fukuda faction. I am simply pointing out that Ohira's down-to-earth, sensible, and in some ways courageous statements were more warmly received by party members, such that Ohira lost no ground in the primary election. It almost seems to me that the image of the "undependable Ohira" has nearly been canceled by this quiet and courageous statement.

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Perhaps I have dwelt too much on Ohira's victories. In order to avoid this accusation, I would like to introduce the following comment, even though it be repetitive. "The results of the prime minister election may have erased the image of a right-wing LDP, but there still remains the strong image of the moneybags LDP." How can the new prime minister, Ohira, respond to this criticism?

Although the political views of Ohira and Fukuda differ to some extent because of a difference in generation, it could also be due to differences in age and upbringing. Fukuda was born in 1905, Ohira in 1910--a difference of only 5 years. In contrast to Fukuda's boasting of "Meiji 38 years old," it would be unlikely for Ohira to say "Meiji 43 years old" even in jest. In contrast, one recalls that Ohira was reportedly baptized in his youth as a Christian, and followed Toyohiko Kagawa's teachings, and considering his school days in the early Showa period, one feels an association with a lingering image of democracy in the Taisho period. On the other hand, while Fukuda, with the same background in the bureaucracy of the Ministry of Finance, took the straight elitist road from the First High School to Tokyo University to talented bureaucrat. Ohira spent 8 years on a circuitous road from the Takamatsu Higher Business School to the Tokyo University of Commerce. This difference in background may account for some of the differences in their personalities.

Hope To Cope With the Right-Wing Forces

It was said during the general election for the prime ministership that "there shouldn't be much change in political direction, foreign diplomacy, or economic policy, whether Fukuda is reelected or Ohira becomes the new prime minister. The problem is actually Ohira coming after Fukuda." Let us see what this means.

It is difficult to believe that there will be much change in diplomatic or economic policy because of Fukuda's retirement and Ohira's appearance on stage. There should be a change in political style, however, if not so much in political direction. For instance, in contrast to Fukuda's earnest desire for a return to absolute majority rule by the LDP, Ohira conceives of an age of relative rule by means of a flexible alliance with opposition parties.

In June 1977, Ohira coined the word "partial alliance." This indicated the possibility of a timely and opportune alliance with opposition parties before the Upper House election in which a reversal of the balance in conservative and reform seats was anticipated. Actually, the balance was not reversed, but in view of the almost matching strength of opposition parties in both houses of the Diet, Ohira as party chairman had been in reality for the past 2 years conducting Diet operations on the basis of partial alliances, such as on the issue of budget amendment. Prime Minister Fukuda, who could hardly disregard this reality, had to play along

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with Diet management on chairman Ohira's terms. On the other hand, Fukuda's earnest desire was early dissolution of the Diet followed by general elections to regain an absolute stable majority in the Lower House. This hope was never fulfilled because of defeat in the prime minister election and subsequent early retirement. Fukuda also tragically became the only prime minister who didn't experience a general election in the 23-year history of the LDP after Tanzan Ishibashi, whose administration only lasted 2 months. One can easily understand Fukuda's disappointment.

The job of dissolving the Diet and holding a general election was now passed on to the new prime minister, Ohira. Ohira is in no hurry to undertake this task, and it will probably be postponed until after the fall of 1979. This can be partly attributed to Ohira's nature to be discrete and not to force the issue on any matter, but also there is no urgency for Ohira to plan forceful recovery of an absolute majority by the LDP at this time, and national political objectives can be readily achieved by means of collaboration and a partial alliance with the opposition parties. At a joint press conference when he entered the primary election race, Ohira stated "My way is to think together with the people, to avoid unproductive confrontations, to avoid rigid thinking, and to conduct politics in an effective manner. I would like to adopt the posture of confronting difficult problems by including opposition parties and, if possible, together with all of the people" (4 November).

From the standpoint of the high posture faction, which aims for recovery of absolute majority control by the LDP, this sounds of defeatism. Antagonism and resistance to the Ohira administration from right-wing forces represented by the Seifu-kai is expected to increase. How will Ohira cope with this?

Behind this political posture lies what might be called Ohira's historical perspectives and political philosophy. The era of the old and rigid conceptual and ideological scheme of confrontation between the conservatives and the reformists has ended. As the interests of the people become more complicated and multifaceted, one needs to understand that the only way is to develop a broad consensus. In this sense, Ohira appears on stage at a turning point in Japanese politics.

Who Will Carry the Responsibilities Of the 1980's?

The decades following 1955 and 1965 were the golden days of conservative rule and fast economic growth in Japan. According to the Western calendar, this was the "order of 1955," but to be more exact, this probably ended with the fall of the Sato administration in 1972. These golden days were supported by three successive bureaucratic administrations--the Kishi cabinet for 3 years and 5 months, the Ikeda cabinet for 4 years and 4 months, and the Sato cabinet for 7 years and 8 months, a total of 15 and a half years.

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The retirement of the Sato administration, which was too long, signaled the sunset of LDP control, and the beginning of days of confusion and search. The three transition administrations--the Tanaka cabinet of 2 years and 5 months, the Miki cabinet of just over 2 years, and the Fukuda cabinet of less than 2 years, totaled no more than 6 years and 5 months. The depth of the turmoil and confusion is evident when the lengths of the last few administrations are compared to the 7 year, 8 month rule of the Sato administration.

The three transition administrations were strongly characterized by their critically defensive attitude calculated to avoid any danger to the LDP. The Tanaka administration talked of breaking the deadlock in domestic and international affairs by "determination and action." Although the deadlock in foreign affairs was resolved by the realization of normal Sino-Japanese relations, there was less success in domestic politics because of an off-beat idea about "reconstruction of the Japanese islands," not to mention the disastrous effect of the oil shock.

The Miki administration following Tanaka, who was forced to retire as a result of money-politics scandals, stressed a cleanup in politics and a return to conservative rule on a platform of morality under the banner of the "clean Miki." Although a thorough investigation of the Lockheed scandal would have been an appropriate mission for this administration, it was limited because of a basic weakness in the party which rendered the administration impotent in carrying out its policies.

The Fukuda administration, which came on stage after the Lockheed scandal general election defeat, barely escaped defeat in the Upper House election, and while proclaiming a return to conservative power rule, it exercised its administrative capabilities in disposing of pending problems. However, Fukuda's over-confidence and high posture, against which Miki had warned, led to his resignation as a result of being tripped up by the primary election system which he had himself introduced. The days of both the Miki and Fukuda administrations can be said to have been spent in a succession of trials and errors.

The question now is whether the Ohira administration can put an end to these trials and errors committed by the three previous administrations and stay in power for any extended length of time. There are a number of conditions in his favor, but whether or not he can realize this advantage will depend on the new prime minister's personality.

Prime Minister Ohira's term runs to the end of November 1980. Although the problem of extending the prime ministership another 2 years is yet unresolved, there is every possibility that he can complete his first 2-year term and then hope for a 4-year two-term stay in office. In other words, Ohira will be in a position to direct the events of the 1980's.

While the 1970's is about to end in a continuation of confusion and search, this also marks the end of the so-called "postwar" type of Japan which peaked in the 1960's. This decade can also be considered a time of going through the birthpains of entering the 1980's.

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Japan up to now has been excessively locked into a textbook confrontation between conservatism hoping for return to a prewar Japan and the reformists desiring to reap postwar benefits. However, 30 years after the war, the "warless" class, which is not interested in any such scheme, now almost constitutes the majority. It seems that the new prime minister, Ohira, is quite aware of the problem of what kind of politics is required to respond to the interests and desires of this "warless" generation.

Fukuda typically represents the conservative desiring a return to the prewar world. I think, however, that Nakasone is different. His series of recent opinions and posture statements seem to envision a political front adapted to a new era, after breaking down the unproductive confrontation between the prewar and postwar factions. The content of his views differs considerably, however, from those of Ohira, which seems to be the heart of the problem for the LDP.

In any event, there seems to be no clear winner candidate for the prime ministership to follow Ohira. Ten years ago, during the Sato administration, one could easily name four post-Sato candidates--namely Fukuda, Tanaka, Miki, and Ohira. They actually succeeded to the prime ministership in the order of Tanaka, Miki, and Fukuda, with Ohira the last to take the stage as the prime minister. An honest opinion is that after Ohira, the LDP will have run out of potential leaders. This could easily provide a motive for a long run by the Ohira administration. Yasuhiro Nakasone and Toshio Kawamoto, two candidates in the recent prime minister election, are considered as possible successors to Hira. Also, as soon as Ohira became prime minister, the name of Kiichi Miyazawa should start to attract more attention. Other possibilities are Tokusaburo Kosaka, Shintaro Abe, and Yohei Kawano, who was instrumental in reorganization of the conservatives. If Prime Minister Ohira's mission is to bridge and reconstruct conservative politics in the 1980's, then the discovery and training of successors, established or unknown, becomes a part of that job.

However, Ohira, who has just ascended to the throne of political power, would naturally have no time to devote to problems such as the training of successors. The more urgent and major problem is what the Ohira administration is supposed to do from now on.

During the prime minister election, Ohira spoke frequently on political philosophy and political techniques, significant words characteristics of Ohira. For instance, with respect to political posture, Ohira made frequent use of the words "flexible but strong," and he also expounded on "reaching an agreement through persistent persuasion and understanding." They closely resemble the expression "tolerance and patience" or the "politics of low posture" of 18 years ago.

However, 1980 is no longer 1960. In 1960 Prime Minister Ikeda played the star role and called the shots, while director of the secretariat Ohira played the role of deputy and planner. Ikeda, while aided by the political

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tactics orchestrated by Ohira, led the charge and achieved the major political goals of increasing income, rapid economic growth, and the building of an economic empire. Now in 1978-1979, Ohira himself is on center stage and doing the performing. Perseverance is commendable and so is persuasion, but it is not altogether clear what political objectives Ohira hopes to achieve by the use of these political tactics. Words such as "from quantitative expansion to qualitative improvement" or "from material to spiritual" bantered about during the prime minister election represent only concepts which can hardly substitute for hard political goals to inspire the public. For instance, at a press conference with the new prime minister on 1 December, Ohira was questioned about the "one strategy and two plans," namely, the comprehensive security strategy, the plan to strengthen the foundation of the family, and the rural-urban development plan. His replies were "it does not represent the establishment of any new goals," "will reconsider the reordering of priorities of existing policies," or "to simply augment and bring to completion wherever there has been a deficiency."

Such responses can hardly represent political goals to inspire the will and the spirit of the people.

The most important political quality to be expected of Ohira, who has now become the star and player, should be the decisiveness to be able to determine what and when. The qualities of Ohira, previously known as a superior aide, planner, and number two man, are now in question for a man delegated with the highest authority. Can Ohira respond decisively enough to problems to get a passing grade?

A superb politician is said to act out history. Is Ohira, who likes to read history books, prepared to act out his own pet phrase "the eternal present" in Japanese history?

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POLITICAL AND SOCIOLOGICAL

LDP FACTIONAL ACTIVITIES GEARED TO 1980 PRESIDENTIAL ELECTION

Tokyo ASAHI SHINBUN in Japanese 18 Feb 79 p 2

[Article: "Signs of Growing Fukuda-Nakasone-Miki Cooperation; Mutual Soundings Behind the Scenes Shaking Ohira Rule"]

[Text] A little over 2 months after the launching of the Ohira regime, the Fukuda, Nakasone, and Miki factions, which were defeated in the Liberal Democratic Party presidential election, have completed rebuilding their organizations and have begun to display an attitude of intensifying activity shaking Ohira's rule, which is centered upon the united Tanaka and Ohira factions. However, upon probing into the internal affairs of the three factions, it can be seen that there is also a strong element of continuing to sound one another out with an eye to next year's presidential elections. The Miki faction, in particular, has displayed an attitude of distancing itself, and with the differences among them, it appears that for the present their cooperation will be on an issue by issue basis.

Giving momentum to the joint moves by the Fukuda, Nakasone, and Miki factions was the drama surrounding the recent selection of a successor to Speaker of the House of Representatives Hori. This was due to the success of the three factions in lining up behind a move to dump Kazuo Fukuda, said to be the 'favorite,' and bring about the selection of Speaker Nadao. From the Fukuda faction leaders even came the remark that, "This is the beginning of a Fukuda-Nakasone-Miki alliance counter to the Ohira-Tanaka alliance." Then, at the Executive Board meeting on the 16th, members close to the Nakasone and Fukuda factions fiercely attacked the arguments coming from Ohira faction leaders and others favoring the freezing of the budget for the E2C early warning aircraft. Concrete moves such as these have surfaced to date.

However, this is not all. One thing sparking the intra-party struggle is the strong possibility that, with respect to the problem of party reform, the Fukuda, Nakasone, and Miki factions will move in step on the point that "the president and the chief secretary should not belong to the same faction," and Ohira's problems in managing the party are bound to increase. However, even if we may speak of three faction unity, their internal affairs are complicated.

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Fukuda-Nakasone-Miki Alliance Euphoria

"At first we were in complete disarray concerning the selection of the House speaker, but in the end we managed to get in step. This is the creation of a Fukuda-Nakasone-Miki alliance to counter the Ohira-Tanaka alliance." After the emergence of Nadao as House speaker 1 February the Fukuda faction leadership seemed overjoyed. At the time of last year's presidential election the Fukuda camp vigorously pursued a strategy of cooperation between the Fukuda, Nakasone, and Miki factions in the final election by Diet members. However this faded away with the avoidance of a final election. From the standpoint of the Fukuda faction leadership which was the center of this strategy, even if belated, this must be like a dream come true. With respect to the emergence of House Speaker Nadao, prior to the falling into line of the three factions, Prime Minister Ohira was said to have decided to appoint Nadao in order to avoid turmoil in the party. However, the three factions assert their effectiveness, saying, "Perhaps the prime minister's decision came earlier in time, but the prospect of three faction unity must have put pressure on him."

Bases for Dissent Abundant

At present, the bases for unsettling the Ohira regime are party reform and treatment of budget deliberations. With respect to the problem of party reform, discussions have begun in the Party Reform Promotion Headquarters; however, pros and cons of the positions of president and chief secretary being taken by the same faction are the greatest roadblock. Already the Miki faction has argued for separation, stating at the general meeting on the 15th, "The positions of president and chief secretary should not be occupied by the same faction." Both the Fukuda and Nakasone factions, arguing for separation, crushed the Ohira proposal to name Zenko Suzuki chief secretary at the time of the launching of the Ohira regime, and a confrontation seems likely with both the Ohira and Tanaka factions, which believe strongly that having both officers from the same faction is all right.

In the case of the budget deliberations, the problem is the freezing or elimination of the E2C budget. The suspicion was strong that the fact that the soft line, that freezing was unavoidable, became a target for attack at the general meeting on the 16th was an indication of an assault by the Fukuda and Nakasone factions. Those receptive to the opposition party demand for freezing are relatively numerous in the Ohira and Tanaka factions, while opposition to freezing is in the majority in the Fukuda and Nakasone factions.

Next Presidential Election the Target

Behind the attempts by the three factions to intensify their regime shaking activity is the fact that they have recovered from the shock of defeat in the presidential election and have completed for the present their

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organizational consolidation. The Fukuda faction, which was seen by other factions as likely to split if the former prime minister retired, has revived under the name of the Clear Harmony Club [Saiwa Kai]. It is united with Fukuda at its head, a party reform headquarters has even been established within the faction, and already provisional organization for policy and strategy committees for the coming presidential election and a general election committee has been completed.

The Nakasone faction has put forth a goal of 20,000 party members for each Diet member, and has launched a party reform committee. It has also set up special committees on housing and urban development, attempting to create a "Nakasone Plan" to counter Prime Minister Ohira's Garden City Plan. The Miki faction, also, has established a political ethics committee, and along with creating an organization to argue the basic point of party reform, the Miki faction selling point, it is full of ambitions. According to one faction leaders, "We want 500,000 affiliated party members who can become our basic vote."

Still Enemies

All of the three factions value highly the Fukuda-Nakasone-Miki cooperation which succeeded in the House Speaker Nadao designation. However, when it comes to the question of the degree or course of future joint action, for the moment views differ widely.

If Fukuda faction leaders assert that the Fukuda-Nakasone-Miki versus Ohira-Tanaka framework will continue in the future, Miki faction leaders stress that, "Our basic stance is keeping equidistant from the Ohira-Tanaka and Fukuda-Nakasone groupings." Each is looking toward the next presidential election, and calculations concerning how to seize the role of leader are at work.

The Fukuda faction is attempting to tie the energy of Fukuda's term as prime minister to the party presidential election. The Nakasone faction is aiming at a three faction system under its leadership. The Miki faction does not wish to be buried within a three faction setup.

Various types of conferences among the three factions have been held frequently even since the presidential election, but the most forward looking have been the Fukuda-Nakasone. Executive conferences of the Fukuda and Nakasone factions have been held three times since last year's presidential election, and middle level and younger members' meetings are also being held. However, reactions of participants have been mixed, ranging from the view that, "These are preliminary moves in strengthening cooperation between the two factions and a Fukuda-Nakasone-Miki alliance," to the assessment that, "These are merely an exchange of views."

Within the Nakasone faction there is also the opinion that, "Rather than intensifying a stance of vainly challenging the Ohira-Tanaka alliance,

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searching out a route to power within the framework of the party as a whole is the better strategy," and there are those who interpret the fact that former Executive Board Chairman Nakasone conferred with Tanaka faction leader former Minister of Health and Welfare Torao Ozawa on the 16th as evidence of this intention.

Contacts between both factions and the Miki faction are still at the level of individuals, and exchanges between leaders have not materialized. Within the Miki faction the belief is strong that, "Rather than falling into a three faction setup, holding a casting vote in political affairs will show the strength of the faction," and it appears that mutual soundings among the three factions will continue in the future.

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POLITICAL AND SOCIOLOGICAL

U.S. NUCLEAR UMBRELLA IN EAST ASIA CLAIMED NO LONGER EFFECTIVE

Tokyo SHUKAN ASAHI in Japanese 16 Feb 79 pp 28-30

[Article: "More Than a Dagger Thrust in Japan's Ribs--Real Meaning of Conversion of Etorofu and Kunashiri Islands as Bases by USSR."]

[Text] Full-fledged military bases were under construction on Etorofu and Kunashiri Islands by the Soviet Union. This was confirmed by the Japan Defense Agency. Some officials say agitatedly that, in addition to creating a new barrier to the return of the northern territories, it is tantamount to a dagger pointed in Japan's ribs. What is the Soviet Union's real intention? How should this situation be interpreted?

On 30 June when the news was flashed, the mayor and assembly chairman of the city of Nemuro, Hokkaido, which is only a stone's throw from the islands of Etorofu and Kunashira, jointly sent several urgent telegrams to Tokyo. They were addressed to Prime Minister Ohira, Foreign Minister Sonoda, and the speakers and Foreign Relations Committee chairmen of the Upper and Lower Houses of the Diet.

"We local citizens are greatly shocked by the fact that the Soviet armed forces have built permanent bases on the two islands which are our rightful territories. We request that you take strong measures to have the Soviet forces depart from the islands and to have the four northern islands returned as soon as possible."

However, if one expected the residents to be caught up in a wave of commotion, it was to the contrary. Chairman Mitsuo Yanami of the Nemuro City Council to promote the return of the northern territories stated, "We must absolutely prevent the demand movement from losing momentum because of recent events," and adds, "However, we should refrain from causing increased investigations and seizures of Japanese fishing craft by the Soviet Union, and from hurting our fishing industry by making too strong a demand." "The question is, will it henceforth cease to be a matter of mere violation of the fishing treaty and become a cause of suspicion of violating military secrecy?"

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The shock and uncertainty of the local inhabitants, who depend on fishing in the northern waters as their key industry, have doubled and tripled.

Maneuvers Would Have Been Preferable

According to investigations by the Defense Agency, the Soviet military installations constructed on the islands are as follow. Military personnel total some 5,000 men, or roughly one battalion, of which 4,000 are stationed on Etorofu and 1,000 on Kunashiri. Among the facilities, the existing airfield has been repaired and expanded, and a new radar site has been added. Also, technical components include a squadron of anti-aircraft fighter planes, a patrol brigade, a communications brigade and a commissariat.

The Defense Agency has known about the movements of the Soviet forces on the islands since the early half of last year. First, at the end of last May, the radar in Wakkanai caught the busy activities of the Soviet forces. Two LSTs headed east on two occasions, while a medium-size Antonov transport plane headed towards Etorofu on a total of 11 trips, accompanied by 3 or 4 large helicopters.

Meanwhile, according to Soviet communications caught by the radio monitor in Hokkaido, it was learned that steel planks for temporary runways, cement and construction machinery were brought ashore. Concurrently, a considerable number of new military personnel was being deployed. Since it was common sense from a military standpoint that bases should not be built adjacent to border areas because they would be vulnerable to attack, the then joint chief of staff Hiroomi Kurisu decided that "they must be conducting maneuvers." Also, it is still fresh in our memory that Kurisu revealed his judgment openly and this became an issue in the Diet as a "dangerous and careless statement." In retrospect, the views expressed by Defense Minister Shin Kanemaru were correct when he explained it as "a misjudgment by Joint Chief of Staff Kurisu" and said, "The movements of the Soviet forces do not constitute maneuvers."

Of course, the debate in the Diet was ended with a reprimand of Kurisu, but it did not solve the problem itself. In retrospect, one Defense official pointed out the half-baked solution by the Diet, stating, "If they were not maneuvers, it could only mean the islands were being fortified as bases. If they were maneuvers, the troops should eventually return home. However, strengthening the bases would imply that they will not leave, which would be a much more serious problem."

The winters around Etorofu and Kunashiri become severe in November. If they were conducting maneuvers, the pullout operations would be easily detected around that time. However, there has been no sign of such a pullout. Therefore, the Defense Agency has made a final judgment, with the help of data obtained from the United States, which boasts a strong data-gathering capacity through the use of spy satellites, that "they have become full-fledged bases."

What does all this mean? There are apparently several answers. The Defense Agency sources naturally take the most critical outlook that "it is a dagger

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thrust in Japan's weakest spot." It analyses the Soviet intention as follows.

Under the Japan-U.S. security pact, Japan was not such an important existence in the past from the Soviet viewpoint. However, last August Japan signed a peace and friendship treaty with China, her former enemy. Meanwhile, the goodwill and friendship pact with the Soviet Union still has not materialized. Anti-Soviet feeling is rampant in Japan. At this point, there is the need to deploy a sizeable number of troops and apply political as well as military pressure against Japan.

Aim Is To Turn the Sea of Okhotsk Into an "Inland Sea"

The Self Defense Forces stationed in Obihiro in eastern Hokkaido consist of only one division (about 5,000 men). The reason the Soviet forces deployed an equivalent number of troops on the two islands was surely not to defend two tiny islands. It is an overdeployment from the standpoint of their defense. The answer seems to lie rather in a "secret motive."

"If so, then should an emergency situation arise, the existing Self Defense Forces are far too inadequate. It is necessary to drastically strengthen our defense in this area. An airfield must be built in the Kosen (Nemuro-Kushiro) plain. Hawk missiles must be brought in. Mechanized troops would also be necessary. Otherwise, the security of 5 million people in Hokkaido cannot be guaranteed."

Other Defense Agency officials make frightening references to the abandonment of eastern Hokkaido, albeit as a hypothetical case. It sounds as if tomorrow Soviet landing craft might come swarming in on the beaches of Todohara around Lake Otainuma, the famous tourist spot in eastern Hokkaido.

In order to strengthen the existing Self Defense Force, "the present defense expenditures of 1 percent of the GNP is far too inadequate. We would need expenditures between 1.5 and 2 percent," according to Defense Agency sources.

However, military commentator Hideo Aoki has a different view. He says, "There can be no dagger pointing at Japan, merely from the standpoint of materiel supply. There are no harbor facilities on the islands which could unload supplies to be used for attacks. If they intended to attack Japan, they could come from the Siberian mainland and from Sakhalin. The landing points would be Ishikari Bay and Wakkanai."

According to Mr Aoki, the Soviet forces have been mainly defense-oriented forces, at least in the past.

The M-25 jet which landed in Hakodate was also a defense fighter plane equipped with air-to-air missiles.

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"Unless we acted carefully under those considerations, we would be making a grave mistake. They would probably not attack us in the near future. Abandon eastern Hokkaido? You must be kidding." Then, why did the Soviet Union act as it did? His view is that it was "strictly from the standpoint of nuclear strategy vis-a-vis the United States." On this point, Tomohisa Sakana, editorial writer of the ASAHI SHINBUN, completely agrees.

"By controlling both ends of the Chishima island chain with bases on the two islands of Etorofu and Kunashira, and with the Petro Khabarovsk base on Kamchatka Peninsula, the island chain could become a formidable barricade protecting the Sea of Okhotsk. The Sea of Okhotsk would thus turn into a Soviet inland sea. In other words, their aim is to build an impregnable sanctuary against foreign threats."

The Soviet Pacific fleet in Port Vladivostok includes some 100 submarines. Half of these are nuclear subs and about 30 are said to carry nuclear missiles. In case of war, these subs would pass through the Soya Straits and spread out in the Sea of Okhotsk. From that position they would be able to launch missiles toward the U.S. mainland.

The U.S.-Soviet nuclear arms race in the 1960s was measured in terms of the number of their respective ICBMs. However, with the increase in the explosive power of nuclear missiles, their target-hitting precision was improved. As a result, the ICBM land bases are now within range of destroying each other. That would leave only the subs, which would launch their missiles while moving around.

At one time, the Soviet submarine missiles (SLBMs) had a short landing range. Taking the Pacific Ocean as an example, they would have landed midway between Hawaii and San Francisco, and would not have reached the U.S. mainland. Today, however, long-range SLBMs, such as the SSN-8 (8,500 km range) and the SSN-18 (9,000 km range) have been developed. They would reach from the Sea of Okhotsk directly to the U.S. mainland.

U.S. Umbrella Now a "Torn Umbrella"

Of course there is also a Soviet submarine fleet on the western side. It is poised to move from Murmansk on the Arctic Ocean coast, pass through the north side of Norway and strike at the U.S. mainland from the Atlantic. However, they would be immediately caught in the undersea anti-sub network laid by the Western nations from Greenland to Scotland.

On the other hand, the U.S. fleet would find it difficult to penetrate the "Chishima barricade" in the Sea of Okhotsk.

Additionally, the straits between Etorofu and Urup Island was heretofore viewed as the most easily penetratable spot in the "Chishima barricade." Therefore, the purpose of strengthening Etorofu as a base could be to increase its capability as a watchpoint for the straits. Our source in the Defense Agency agrees with this interpretation.

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"Half of the Soya Straits, the entrance to the Soviet sanctuary, is Japan's sea territory. Japan's attitude would greatly influence Soviet strategy. Therefore, the USSR reads weakness in Japan's foreign policy and is using threat to pressure Japan with the implication, 'Don't fool around with us.' Also, they are showing their determination to the effect that 'the two islands are now key military bases. Be assured that we will never return them.'"

Fortifying the two islands and turning the Sea of Okhotsk into a Soviet sanctuary has caused a major change in the nuclear balance between the United States and the Soviet Union. There is also the opinion (Mr Sakanaka) that "the U.S. nuclear umbrella in East Asia is now about to become a torn umbrella."

How then will Japan react? Mr Sakanaka anticipates that "there will be a stronger demand from the rightwing to strengthen our defense power to counter Soviet military power. On the other hand, there could be increasing contention from the leftwing that U.S. supremacy has already declined; that the continuation of the Japan-U.S. security treaty entails the great danger of Japan's being involved in a U.S.-Soviet nuclear war; and that the only alternative is the abrogation of the treaty and the adoption of a position of neutrality."

From an international standpoint, China will probably not accept such a situation in silence. China will probably use it as a reason for a Japan-China alliance, saying, "The northern bear has resumed his sinister moves... another case of hegemony." (Defense Agency source)

The United States might also pose a difficult proposition. For instance, there is the demand for a stronger Self Defense Force so that "Japan would have the power to block the Soya Straits." Whether or not that is the reason, the Maritime SDF is already reported to be planning the capacity for a mine blockade with the use of C-130 transport planes for its middle stage defense plan, which begins next year. Of course, this will gravely aggravate the Soviet Union, which is sensitive to U.S.-China-Japan collaboration. On 5 February, the Japanese Government called Soviet Ambassador to Japan Polyansky to the Foreign Office, where Councillor Takashima strongly protested that the Soviet moves were "contrary to the spirit of an early and peaceful solution to the northern territorial problem," and he demanded the withdrawal of the military fortifications on the two islands.

How much this was based on a firm foreign policy and defense stance remains to be seen within the framework of our future foreign policy vis-a-vis the Soviet Union, the United States and China.

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SCIENCE AND TECHNOLOGY

S&T AGENCY 3-YEAR PROJECT ON SUPERCONDUCTING ELECTRONICS

Tokyo YOMIURI SHINBUN in Japanese 17 Dec 78 p 11

[Text] The Science and Technology Agency has embarked on research on the entirely new electronic element "superconducting semiconductor" which possesses superhigh properties such as very high speed switching, very low noise, and very low power consumption, which are indispensable attributes of leading electronic equipment to be used in future very large electronic computers, space communications, electromagnetic astronomy, and remote sensing. The research will be conducted according to a 3-year plan, and 41 million yen from the JFY 1978 Special Research Promotional Fund assigned to this institute will be allocated to this project.

Noise Is Greater the Higher the Temperature

The noise generated by electronic elements is primarily the product of electrons that are in random movement within the interior of these elements, and this random motion is greater the higher the temperature. This is why parts of certain space communication equipment or electromagnetic telescopes are cooled with liquid nitrogen to facilitate the detection of very weak signals and their amplification and thereby minimize the contribution of noise. On the other hand, when the usual types of electronic elements are cooled to too low temperature, their properties deteriorate, and they no longer can maintain normal operation.

When superconducting bodies are cooled to temperatures of the order of -270°C or lower, their electrical resistances drop to zero. In addition, electrons tunnel through electrical insulators to maintain their flow thereby developing a characteristic unique to superconducting bodies. This present research is aimed at exploiting these properties to produce semiconductor elements that can then be used as diodes or transistors.

When temperature is lowered to an extremely low level, noise is also reduced to a very low level. When noise is reduced to a very low level, then, for example, a very weak signal can be amplified greatly as a result of which can resolve a problem that is presently impeding electronic equipment development. This is why superconducting semiconductors have been tabbed

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the "trump cards" that will become available to future electronic elements, and spirited research is being promoted in the Western world headed by companies such as IBM. Present research is directed at studies involving the exploitation of the Josephson effect, which is the property in which current flows between two superconducting thin plates even when an insulating membrane is placed between them. Now these Josephson elements require superthin insulating membranes of the order of several dozen Angstroms (an Angstrom is 10^{-8} cm), and the technology for fabricating such thin materials has not yet been developed. Consequently, another wall is being faced.

Production Will Be Possible With Future Technology

This is why research in this country is being directed at attempts to prepare these superconducting semiconductors by the vapor deposition of semiconductor with good very high frequency characteristics (superhigh speed switching property) on very thin semiconductors can be as much as 100 times greater than those of the Josephson elements, and it is felt that no undue difficulties will arise even employing technology available from the past. In addition, where the Josephson element is limited to a diode (one type of tunnel diode), this superconducting element has the possibility of being developed into a transistor type element with varied properties, which gives it another great advantage.

According to the research execution plan of this agency, theoretical research on superconducting semiconductors and research on semiconductors will be delegated to the Electrotechnical Laboratory of the Ministry of International Trade and Industry (MITI) and research on this superthin finishing of superconducting thin membranes to the Institute of Physical and Chemical Research. These will be followed by attempts to prepare super low noise electromagnetic wave detectors that can receive electromagnetic waves ranging from microwaves to the far infrared region in the form of a first stage model aimed at making practical the fruits of the research described above, and this effort will be centered at the Electromagnetic Wave Laboratory under the Ministry of Postal Services.

This detector will have the capability of detecting even the very weak electromagnetic waves that come from astronomic space (these were not detectable by the astronomic instruments of the past), and it is planned to conduct various types of field tests at laboratories such as the Electromagnetic Wave Laboratory.

Every Country Is Turning to Active Research Activity

Research on superconducting semiconductors can hit an impasse should research on the Josephson element hit a dead end, and the different leading electronics countries are quickly girding effort in other directions. Research activities are being activated in efforts to develop superconducting transistors, superconducting integrated circuits (IC), and superconducting large-scale integrated circuits (LSI) of the future.

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SCIENCE AND TECHNOLOGY

CERAMICS R&D FOR GAS TURBINES STARTED AT KYUSHU INSTITUTE

Tokyo NIKKAN KOGYO SHINBUN in Japanese 27 Dec 78 p 11

[Textp (Saga) The Kyushu Government Industrial Research Institute of the Agency of Industrial Science and Technology (Yado-machi, Torisu Shi, Teiichi Hayashi director) has embarked on the development of ceramic material for use in high efficiency gas turbines as a designated research subject.

This is an important research for developing high performance SIARON family ceramic material capable of withstanding high temperature of the order of 1500°C to be used as parts for high efficiency gas turbines, which is a research and development theme in the country's Moonlight Plan. A 7-year plan is under way with the purpose of attaining the objective of a practical process by JFY 1984.

During the period between 1974 and 1977, this institute was engaged in the development of new superhard and heat resistant composite material as a special research as a result of which it succeeded in developing the silicon nitride-alumina family sintered product "SIARON" with superior high temperature strength, and this material is being looked on with great interest as warranting utilization research for applications such as blades of gas turbine and jet engines. Already some large industries such as Ishikawajima-Harima Heavy Industries, Tokuyama Soda, and the Electro-Chemical Industrial Co, Ltd have dispatched research personnel to this institute to engage in practicalization research, and the outlook for this material as a new ceramic appears promising.

This is the background for the assignment of this developmental research involving the high performance SIARON family ceramic as a designated research with very highly evaluated characteristics. Yukio Higashiyama, head of the Materials Development Department in charge of the project, has said, "We would like to apply the basic data of SIARON to develop a material that can withstand 1500°C and also incorporate impact and corrosion resistance to an order high enough to give us a practical product."

This research is part of the research and development of new materials necessary to the construction of very high thermal efficiency gas turbines, which are part of the energy conservation program under the Moonlight Plan.

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It will not be limited to just the development of this SIARON family ceramic, but will also include development of blades and other gas turbine parts. As a result, this may turn out to be a project of major proportions, greater than anything this institute has ever handled in the past.

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