

Behavior Report

*Akio KOBAYASHI**

1. Introduction

There was nothing special such as people would expect from the word "South Pole Traverse". Only the period of the traverse was rather longer than usual. It is quite normal to quarrel not only among brothers but also between wife and husband even in a peaceful home over a long period of time. Our 5-month journey was not an exception. In spite of many happenings we safely completed the traverse. There is not the slightest intention of criticizing what happened during the traverse and also I think there is no necessity to reflect on it. Putting aside who thought what and who did what, I shall record here some of the things that occurred during the time of the South Pole Traverse.

2. Autumn Trip

Before the South Pole Traverse, an autumn trip was carried out for the purpose of depositing fuels and familiarizing with cold. The short three-week traverse, told us many things and gave many lessons. The temperature of nearly -40°C and the wind of 10 and some metres per second thoroughly taught us the rigors of keeping alive by breaking every observation instrument. Even in taking meals, sleeping, excretion, and resting, it was painfully evident that it was necessary for each person to devise the ways of their own and make efforts to carry them out. How much we wished to set up tents in a calm place! We can never forget the happiness of having dinner in a cold place where nothing made us warm all day. Anything warm tasted good. We did not care about the kind of meat we ate. We liked only heavy and sweet tea and side dishes. Excretion was also a hard task, and somebody suffered from constipation. Before going to bed, people seemed to try to find out various ways to avoid waking for toilet during the night. One said it was better to drink something. Another said it was better not to drink anything. Someone put on many pairs of socks. Others went into a sleeping bag with his tent shoes on. However, at the end they found whatever they might try, people who had frequent calls for urination had to wake often during the night. On the other hand, even among the aged ones there were some people who did not suffer from frequent urination. How we yearned for the feeling of "getting warm to one's bones"

* Inokashira Orthopedic Hospital, Suginami-ku, Tokyo. Member of the JARE South Pole Traverse 1968-69.

in a hot bath when we were dozing in the cold and sound of wind. Also in the ways of discharging stool, everybody was devising various ways, such as to ready the toilet paper with one touch, to which way one should face--to windward or leeward, or raise or lower one's hips?

It would be hard to calculate how much these devices and efforts came useful to make the polar traverse easier. From about a month after this autumn trip, jagged lines began to show on everybody's finger nails and they became most clear after two or three months. These lines moved upward as nails grew, and some traces still remained until the end of October. This would be an indication of disturbed growth due to the hardship of the autumn trip.

3. Preparation for the South Pole Traverse

The period from the first part of May, when we were back from the autumn trip, to the midwinter was the time for thinking about the South Pole Traverse placidly. As we took things easy, we started the preparation for the South Pole Traverse, making use of the vivid experiences we obtained from the autumn trip. Someone kept sitting for several days with a soldering iron in his hand for repairing the equipments for observation. Other man was intent in devising some ways to soften the shock of cars. The schedules made during this period was steadily carried out after the midwinter day. Most members were bustling around even on the night previous to departure. Even after leaving St. 16 as an advance party, we had to ask the main party to bring many things left behind.

4. Meals

Taking meals as well as sleeping was the most pleasant thing during the traverse. During our action time, we had our meals in the snow vehicle No. 604 and 605. Members of vehicle Nos. 603 and 606 had meals on Nos. 604 and 605, respectively. When the temperature is low, metabolism becomes heightened. It was nice to drink concentrated whisky in a warm inside of the vehicle after finishing the day's work in outside cold. However, as the altitude increases, the amount of whisky intake markedly dropped. At above 3,000 m, it was suffocating even when we were just sitting, and if one had too much whisky or, one who does not drink much drank a little, they had to suffer from sleeplessness due to difficulty of breathing. As such condition continued for about a month, the calculated amount of whisky of 80 ml per person per day was more than enough all through the traverse. Everytime we had to drink the concentrated whisky with snow in the mug, we always said "We wish we could have ice here!" On the return journey, all of a sudden ice appeared on our dining table. The method of making ice which was devised by a Sake lover member was such a "hard" way of keeping water in a vehicle outside. It took him 100 days to devise this method.

A great amount of comprehensive vitamins and vitamin C preparation were included among the ration and the people were supposed to take them at each

meal time, but almost nobody took them, unless they were given to each one's palm. It has been said that no one is more fond of drugs than the Japanese, but how difficult it was to take drugs if there was no trouble about health.

The manner at the table was much different between the members of vehicle No. 604, who were very gentle and polite, and those of No. 605, who were mostly noisy and rough. In the No. 604 vehicle, they took meals after all the members gathered at the table, but in the No. 605, persons started taking meals as soon as the dishes were ready on the table by the rule of "first-come, first-served". In addition, there would be someone who was eating "pork" saying "nice beef!" Nobody seemed to understand and appreciate the taste of food better. They all seemed to be quite satisfied if they could gulp the concentrated whisky and eat to their heart's content.

Such a happy meal was not always happy for mess duty, because there was no definite rule as to who does the cooking, and anybody who was free at the moment was supposed to do the cooking. However, in each vehicle, eventually only some specified person came to do it and some of those persons might have complained of the work which was not an assignment given to him. The turn of duty should have been decided before starting, and on the return journey, there was a vehicle in which people took turns in cooking.

Obtaining water required the longest time in former antarctic inland trips. Fortunately inside our vehicle, we had a snow melter and by putting snow in it adequate amount of water was produced by surplus heat of the engine as the vehicle moved. We could store 20-40 l of water every day by putting snow in it, whenever the vehicle stopped. This largely saved our time and fuel needed for cooking. A special compliment should go to the planner who set up the snow melter machine on the snow vehicles KD604 and 605.

5. Excretion

Excretion was one of the hardest tasks in the autumn trip. Each member was doing it in his own way, devised by giving considerations to the charging, way of putting down the trousers and underwear, preparation of toilet paper, direction of wind, etc. In the South Pole Traverse, we started after fixing trousers and underwear so that we would be able to do it with one touch. When wind was blowing, most of us did it behind a sledge. Many people dug a hole with a shovel in the leeward side and did it facing windward, and a few others did it facing leeward. After passing 75°S and wind was blowing no longer, we refreshed ourselves by doing it on the vast snowfield separated from sledges, and when the condition of the snow surface became better and the driving became smooth, each camp made a fine toilet and we could do it comfortably. Partly because we did not meet any severe blizzard, not only we never thought excretion a hard thing, but it was one of our biggest delight. When cars were running we did it in some spare moments from observation or during the time of communications by digging a private hole between sledges or behind a caboose taking enough time. Even when the temperature was below -50°C , stool did

not freeze right away and it was still soft when we finished it, and its faint smell reminded us of something human. Though I had given suppositories to those who tended to suffer from hemorrhoids, almost nobody used them, and they did not get worse, either. I wonder if this was because of the warmth inside the vehicle.

As to urine, when the temperature was below -40°C , steam shrouded fiercely right away from hose tip, and at -50°C to -60°C , it was just like when we took off the lid of a boiling pan, and when we saw it from behind, the person looked like a man who holds the hose tip of fireman's pump. It was such a beautiful view that it could make a picture. Hands to hold the hose felt painfully cold, but the hose itself never felt cold. I felt that there was about 100°C difference between body temperature and that of open air.

6. Sleeping

"I want to sleep deeply" was the common desire of everybody during the traverse but sleeping time had to be spared due to the continuous hard movement. In the first half of the outward traverse, people in vehicle No. 605 and 606, members of the second group, were sometimes forced to have only 2 or 3 h of sleep. Moreover, before and after their short sleep, they had to do severe physical labor at an altitude of 4,000 m. They really held out well. Their healthy bodies beautifully met such a situation, and changed their type of sleeping. Therefore, the people of morning type, changing into night type, came to take their necessary amount of sleep for 2-3 h after going to bed, and they supplemented the sleep by taking naps during the time the vehicle was running. It is needless to say that warm snow vehicles helped their short sleep a great deal. It was only during this period when we did not have time to dream. When running became rather smooth, and we were able to have a long sleep, the previous night's dream became a topic of our chatting. After the sun became higher, it was so hot inside the vehicle that everybody slept almost naked, while it was -40°C in the open air. We thoroughly learnt how much we owe to the sun, and at the same time, we thanked the clever person who painted our snow vehicles black, the most effective color for absorbing the heat.

Most of the time during the South Pole Traverse, as the sun never went down, I was afraid that the brightness might disturb our sleep, but fortunately most of us were the type to start vigorous snoring no sooner than we crept into our sleeping bags, even without using the curtain which had been ready beforehand. Therefore, it can well be understood that this traverse was a tiresome one physically and, for some people, mentally.

Anyhow, sleeping was the biggest pleasure during the traverse and, it might also be said that, because we could sleep well, we could hold out such a long hard journey.

7. Observation

Including communication, the keypoint of observation was the problem of how to keep warm and how to protect observation instruments from shock. It seemed impossible for other people to imagine how much the people in charge of this matter and efforts, and how carefully they kept the watch continuously. When something gets out of order, disappointment of these people was so great that even other people could not help feeling sorry, and sometimes the people took all night for repairing, and also there were people who were working hard days and days for a fruitless end. Except in the case of a breakdown of a very vital part, they all repaired the instruments finely by themselves and continued their observation. I praise all of these very great men. I was shown the fact that if one has a firm fundamental knowledge or technique, he can adapt them even for something experienced for the first time. Though it could not be denied that one member's injury gave an extremely heavy burden not only on a certain man but to the whole, more or less, it is worth a special mention that the party completed the observation through the whole course far more than they expected with their spirit and good cooperation.

8. Cooperative Work

Work of supplying fuel, changing the order of sledges, and rushing of drums were cooperative work done by the whole member. Digging of a hole for observation of seismic shooting at every 100 km might be included in this category. Working together after finishing or leaving their own observations or maintenance with common 'heigh ho' under good cooperation was one of the most impressive memories which made all the members understood each other. This might be the hardest one as a work. Nobody wants to do more work than the one assigned to himself, much less in polar region where the circumstances are very hard but somebody must do it. It was also a fight with oneself to actively join such a cooperative work.

9. Life inside the Snow Vehicle

It was an item which was specifically noted on the occasion of the health examination section meeting of JARE 1968-69 that the life during a long period in a narrow space like running snow vehicles is just like a life in a submarine or space capsule and it was hoped I would pay enough consideration on how to cope with such a circumstance. We learned that the only counter measure is to trust each one's good sense and self control. During the first half of the traverse, when the vehicle was running, most of the people, except the drivers and navigators, were reading books and not taking naps. When the running was difficult, there was so much work to do outside the vehicle that they could not do anything else, but when the running became easier, many people were intent on arranging data. At every station, we stopped the vehicle and made long observations, like every 8 or 16 km. Though we were too busy for getting water

or preparing meals to be bored with nothing to do, but as such a time prolonged, trivial complaints, such as comparison of the vehicle with the other, or small complaints concerning daily life were heard on the return journey of the traverse. Even for grown-ups, it seemed not very good to be lazy. Not everybody is endowed with the ability to adapt to the circumstances. However, as everybody was "grown-ups" and could well control himself these complaints stayed as their own personal thought and never developed into big arguments.

Though this was a very rare case, one member had a sudden and the only diarrhea. I wondered if this was a purely mechanical result of an abnormal functioning of intestines due to vibrations of the vehicle. It was very fortunate that there was no constipation, and bumping of the head was protected by hats, and there was almost no effect of the vibration of the vehicle on the human body which I was afraid of.

10. Rest and Amusement

Rest is part of a work, and resting is to conquer the fatigue, that is, to refill the strength for next work. Therefore, rest should be considered as an indispensable part of work. At Syowa Station, the time of tea which was fully charged was strictly kept. While on the traverse, all things did not go on as we were at the base, but everybody with this fine spirits, seemed to be working according to this rule depending on each one's situation. Every time after proceeding 5° in latitude we had one day off. On the off days, we usually slept until nearly noon. There was nothing happier to do than this, but in the afternoons, always something that should be done happened and sometimes we had to work well until midnight. Luckily or unluckily, in fine weather, as stay caused by blizzards did not occur frequently, happen the off day was more pleasant. Of course, our fatigue was not the one to be conquered in such an easy way like one or two days off but I think the members could hold on for such a long time just because they were well trained by afore-mentioned spirit in their ways of daily working. For amusement while they were in action, reading was the most popular. Depending on their moods and circumstances, they read non-fictions, weekly magazines, or literally works. It seemed that the all member were keeping diaries or personal records. We played mahjong a couple of times but nobody seemed to get excited with it. On the way back, we played soft balls with a bat made out of a square log but everybody became worn out due to high altitude of approximately 3,500 m. Though we had been accustomed to the climate, we could not run well at an altitude of 3,000 m and a temperature of -35°C. Open-field eating party which we had several times was good for a change. I encouraged physical exercise to members but except for a couple of members, nobody would do it. I don't know why there was little merriment for singing but they sang only two or three times on the return journey. They were, perhaps, not so placid that they could sing songs. Doing something all together is always hard.

11. Conclusion

Every hardship during the South Pole Traverse have been forgotten and only happy memories remain.

On the return journey, when we got to St. 170, our heart was full of deep emotion, looking back on the far away polar sky we had just passed. "We really have been there". On arriving at St. 16, holding the hands with fellow members from the base group after 141 days, I remember it just as if it happened yesterday that something warm was streaming on our sun-burnt cheeks and we were all saying such meaningless words like "Well, well!".

Even now it is very strange that when no matter how hard it was to drive the cars, we never thought we could not continue the traverse. Supported by excellent leader and well-functioning snow vehicles, our transverse ended. Every member of the party now may be humbly satisfied in thinking that they spent the unforgettable days on the most brilliant stage, standing upon the base built by many forerunners.