

“Challenges for the Customer Needs ”

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More than ten years ago, I was at the 4th grade of university, having no idea what kind of job I should choose, just prior to starting the activity to select the company to work.

At university, I took “Information Science” course after vaguely considered that computer era is really coming.

However, before graduation, I was inclined to consider that computer is just the convenient tool, but not the objective for the dedicated lifework.

I visited R&D sections of several companies, vaguely wishing to find out the job in which I can continue long, utilizing my background of information science, for creation of some new results. After I had several tours of development laboratories for artificial intelligence or robot arm, I came to the interesting keyword “SPACE” for choosing lifework. At that time, that decision reminded me of the fact that I had wished to be an astronaut, and that I liked reading scientific fiction books handling “space”.

Furthermore, I came to have strong desire to make job, which relates to total system, rather than the R&D of some portion of the system.

It might have been the exceptional case to join the company having such indefinite motivation, under the general circumstance in my company that most freshmen join with firm desire to be involved in satellite communication related job.

It was embarrassing that I was not conscious what did it mean to be involved in communication carrier business, and that I didn’t have the even basic technical knowledge of wireless communications and satellite communications when I joined SCC.

As the system engineer, I had to obtain most of the technical knowledge through daily



At the reception of head office of SCC (Dec, 2001)

job itself. For that situation, I have to apologize any problem that I gave to the surrounding people in my company, caused by my technical prematurity.

Now I feel that my selection of satellite communication job under my intuition at that time was definitely correct. It is because I believe it should be difficult to continue the job for long time, unless we can have “dream” or “curiosity” in our job which occupies the large portion of our life both in time and effort. I can say that it was really fortunate that I could obtain the job just as I desired.

Particularly, for women, it is really difficult in Japan to continue to work clearing high hurdles like marriage, birth and nursing.

I myself am going to have the third baby shortly. I definitely keep the will to return to the job after birth, because I love my job and have strong desire to continue the present job.

Looking back my job, and trying to summarize that in one sentence, that would be “I have been endeavoring to establish the satellite communication systems which can respond to users’ needs, realizing the highly reliable link operation”. This is the “ideal case”. Actually, it is not possible to convince myself that I have been successful to give 100% satisfaction to the users’. However, my attitude has been to be as much closer to the ideal, and I would continue to stick to that attitude from now.

As often said, satellite communications is the media which has distinct characteristics. In recent years, broadband backbone applications or multicast applications have been favored above terrestrial links. However, demerit like the link quality degradation by rainfall should be clearly recognized. It is the best approach to design the system, which can utilize the merits of satellite communications to the maximum extent, by realizing the users’ needs after having users’ recognition of above merits.

The system or link must be designed maintaining link quality,



In front of the SNG vehicle with my colleagues

lowering ground equipments cost, minimizing operation manpower.

In the design phase, considering many factors, engineers must be extremely careful not to overlook even the single mis-calculation, which might cause fatal degradation of link quality.

Then, after the process of cooperation activities with the equipment manufacturers or users' including the obtaining of RF license for ground terminals, network operation starts. At the same time, system operation manual is prepared based upon the technical study for achieving the best link quality. On the other hand, inside our company, stable operation of satellite communication link is implemented jointly with our Satellite Operation Division.

I have the miserable experience to lose two satellites in one year, one by launch failure right before joining the company, another one by failure in orbit half year after entering the company.

It was really the painful experience for the satellite communication carrier to lose its most important business infrastructure completely.

I myself, and our company also, could have grown up largely by overcoming such painful situation with the extensive support and cooperation by many people inside and outside the company.

Above are the some hard portions of the job. We have in the contrary big joy in our job. As is the case with large-scale systems including communications satellite itself, some big project requires few years duration for only network design. In order to achieve the design, which can provide the latest technology at the time of operation start, it is necessary to have insight for future market and technology trends. And this is of course extremely difficult task! At the time of system operation start after experiencing such labor pains, if we fortunately could have the message of gratitude from the users'aying "Thank you. It's really convenient!" or "We got excellent picture quality. Satellite performance should be very good! ", I felt very happy as if I myself were praised. And I told to myself "Well, I would do my best again in the next program!"

One of the large-scale program that I was heavily involved is Japanese local government disaster prevention and administration network, "LASCOM". In this network, more than 4,000 ground stations are working even close to our home, for instance, on the roof of town halls or fire stations.

When I visited some place in business or sightseeing for the first time, and saw the antenna pointing our satellite, I felt very happy and encouraging, as if I met old friend in the unfamiliar place.

Since I have been continuously involved in this LASCOM network since the early design phase to operation, and further, to the next generation system deployment now under work, I have a lot of good memories for the system. When my children grow up, I am looking forward to taking them to the antenna at the neighbouring fire station, and giving them the story of their mother's job.

Another big pleasure obtained from my job is that I can get in touch with many people from both customers and manufacturers, and make them good friends. Many business communications can be done through phone or E-mail, of course. However, in my view,



At Space Port West (When LASCOM started services, in Spring, 1992)

face-to-face discussion is still very important for successful business. Particularly, when I could have the understanding and concurrence for some issue through face-to-face meeting, after I could not get through telephone conversation, I feel very much satisfied and happy. As above, my job

gives me various kinds of feelings, pleasure, frustration, and so on.

Recently, I have some desire for the occasions that satellite communications are utilized. Needless to say, satellite communications are tough for natural disasters since the wireless link is immediately provided only by installing ground stations, without any ground cables. Just by this characteristic, satellite communications are highlighted for the applications like TV relay from the battlefield, terrorism, and big disasters. I really wish that satellite communications would be highlighted by more peaceful applications like home broadband Internet for worldwide scale improving digital divide situation. This might be also one outstanding but heart aching characteristic of satellite communications.

Fortunately, I could have been continuing my job after marriage and childbirth in the favorable environment of my company. By nature, I have been living in my own way, and have not felt any handicap of being woman except for the situation like carrying



Nearby the antennas with my children (Jul, 2000)

heavy instruments. However, after birth of my children, considerable time had to be assigned for nursing, and overtime work or business trip had to be limited to some possible extent.

I was sometimes frustrated by such situation, since I felt that both work and childcare are half-done. I was after all able to consider after hearing advices by my colleagues that important matter is doing my best in my possible extent. Situation should be similar for men, when they have problems in family or physical.

As I wrote at the top of this sentence, I had important target to find long continuing lifetime job when I chose the company to work. That target has been gradually achieved by spending every day with the motto of “Health First” and “Not to Accumulate Stress”

It is almost impossible for me to foresee my life in ten years from now, since I have still long life to live. However, as I could find out excellent job suitable for myself, I would like to continue my job as long as possible, being positively involved in the development of satellite communications in near future.