

"My Naval Aviation Experience"

A record of Lecture given by Toshio Hijikata, 2005.04.03

Text prepared by Naoaki Ooishi

Note: Naoaki Ooishi wrote the whole text following, by his own memory and without any written memos. Naoaki Ooishi takes sole responsibility for the content in a whole. Mr. Toshio Hijikata however agreed, in verbal form, with Naoaki Ooishi for his wish the text to be published on J-aircraft. com website, to share it with modelers of same interest.

Mr. Hijikata gave his lecture at a conference room somewhere in Kamakura in peaceful afternoon of the 3rd April 2005. Naoaki Ooishi had not made written notes at all, and he made the following text only by using his own memory very soon after.

Mr. Hijikata had already published his own story in a book, form Kojin-Sha publication, titled 「海軍予備学生 零戦空戦記」 September 2004.

Naoaki Ooishi received the book few days after he completed the text, relieved to find his texts were not differed from what Mr. Hijikata wrote on his book.

Note by Naoaki Ooishi

Caution: Color legend

Black: From papers Mr. Hijikata prepared for the audience on the 3rd April 2005

Blue: Mr. Hijikata's oral remarks on his lecture

Red: Explanation and comments in RED letters are entirely of Naoaki Ooishi's. Glossary of technical terms added elsewhere at Naoaki Ooishi's own discretion.

1) Thank you all very kindly for inviting me to lecturing to you all.

I am OK with standing. I have been a teacher since after the war.

While he was talking, he stood for more than 2 hours.

2) This history is my biography and includes the history of the Dai 13-Ki Yobi Gakusei

(13th Naval Reserve Officer Training Course: hereinafter NROTC or ROTC)

I was a college student when I joined the navy.

Tsuchiura Kokutai, junior officer Prep Course October-November 1943

Before joining the navy, he had majored in science: 2 months, and in arts: 4 months.

Tokyo Haneda airport, flying Type93 trainer December 1943-March 1944 (4 months)
WongSang (in Northern Korea) ("Genzan" in Japanese phonetics) Type96 fighter (A5M)
April-August 1944
Genzan Kokutai (flight instructor), Type96 fighter trainer (A5M),
September 1944-March 1945
203 Kokutai, Sento 303 (F303) Zero52 (A6M5)

More than 5000 men were in the 13th NROTC course. The college students who were on one of news films on commencing ceremony, marching in rain with guns on their shoulder, include 14th NROTC. About 30 percent of officers from the 13th course were KIA.

Learning Morse Codes communication was extremely difficult in the Basic Training Course at NAS Tsuchiura.

I flew some 460 hours in Total by end of the war. This was because I was at first assigned to WongSang Kokutai as a flight instructor. Other officers from the same course had flown 150 hours in average. I was only person who assigned as an instructor. Others are all sent to Special Attack Units.

At WongSang, we used Type96 fighters (A5M) as advanced trainer aircraft. I at first envied other officers who were flying Zeros. But one of our instructor said to me "You will make a better pilot with Type96s." Landing in the Type96 was particularly difficult with its big engine cowling blocking forward view when in landing approach. Its narrowly arranged main landing gear often caused ground loops, and the plane was prone to crosswinds. But I believe that the Type 96 was the best acrobatic machine. I flew as an instructor with officers from the 14th and NCOs from Toku-Otsu Yoka-Ren students.

The Zero had ample wheel tread, and pilot can see ahead easily on landing approach. It was an easy plane to fly and no pilots gave it bad names, as far as I knew.

I strongly feel that my entire life was compressed into my service in the navy, for two years. I have been living a borrowed time since.

Becoming an officer candidate just after two months is amazing. From my own experience with my very short service in JMSDF, I would say he and his colleagues did very well. Two months basic training must have made them barely prepared for naval life. These part time officers did the job very well with their own prides. Their sense of responsibility on the nation's crisis was truly tremendous.

Becoming a flight instructor straight from training unit meant Hijkata was rated as "exceptional". Similar cases are found in USAAC and RAF. A hot pilot, fresh from the school, wants nothing more than to fly from dawn to dusk, without rest. On the contrary, only a few of those who came back from the battle remained eagerness to teach

students, as I heard.

Many of the British bomber aircrewmembers who got through a tour of 30 missions, in many cases, assigned to Operational Training Units, became fed up with repeating same training and would volunteer to take another combat tour soon.

Type96 (A5M) had made pilots very nervous when landing is very interesting to me. If the plane had existed today as a warbird, it must have been one of the best.

3) Show off flying means little

Keep the ball centered in the air

Keep the ball centered in the "Bank and Turn" instrument is a fundamental of flying. But in air combat you would be shot down if you fly straight because enemy pilot can read your next position very easily.

Those who instruct pupils to fly straight might have difficulties to fly the plane to skid or slip intentionally. I have once mentioned on another message board (BBS) that a fighter pilots would skid the plane only when avoiding enemy's shooting. But it should be corrected, because fighter pilots dodged enemy fire by skidding or slipping, during entire air combat.

There were no skidding maneuver practices in the basic fighter training syllabuses. Test and communication flights were the only chances to practice violent skidding and alike.

We flew most missions in formation in normal combat training. Therefore to skidding the plane at large angle deemed dangerous. I used every opportunity such as maintenance and communication flight for to practice these kind of maneuvers. It was the trainings done by myself. I did not at first expect to such a large "side force" during skidding (while skidding your upper body pushed to the direction reverse to the direction of the maneuver). You would not experience any of side forces as long as you fly straight, i.e. ball centered.

Hineri-Komi maneuver was actually in the training and was normally practiced. It was executed near the top of loop by applying cross control (aileron: right, rudder: left) for a short moment. But I have never used it on actual combat, because the plane would be slowed down at the top of loop, making the plane an easy prey for other enemy fighters.

Even from experiences of my own, it can be said that self-studying is a key to become a good pilot. Hineri-Komi was put in normal training program is quite new to me. I will analyze the maneuver on separate writing. It seems the IJN did not rationalistically adopt combat experiences to the trainings.

A. If the ball shifts in flight;

- 1) apply rudder to the direction the ball shifts
- 2) apply aileron opposite to the direction the ball shifted
- 3) or combining these two methods

B. One may use the rudder when; while in a turning to the right

To kill so called "aileron drag". If you apply right aileron by putting the control stick to the right, the aileron on the left wing deflected DOWNWARD to create more drag than the right wing with aileron deflected UPWARD, which reduce drag of the right wing.

This creates initially the yaw to LEFT. The plane banks to the right whilst its nose pointing to the left, sending the plane into "right hand slip". If you want to fly straight to the airstream, you need to apply rudder to the same direction coordinating with the movement of the control stick.

Too much rudder application makes the plane into skidded situation, however.

More rudder application is to correct phenomenon caused by rotating propeller such as: gyro moment, torque and P-factor. If the plane flying at a high angle of attack, the plane's propeller disc slants slightly rearward, creating the axis of thrust shift to the right of the centerline. That is if the propeller rotates clock-wise as seen from the cockpit.

If you keep on applying aileron to one side, the plane keeps rolling to the side as long as the control applied.

Once the bank angle established, the aileron should be back (close) to neutral. The rudder should be applied in coordinated manner with the control stick's movement.

To stay in the altitude in turning one also have to pull the stick to increase the lift correspondingly to "G" increase with the bank angle.

Then the drag increases because of increased angle of attack, and the power setting have to be adjusted (increased) accordingly.

Then the change of propeller(s)' effect have to be corrected by applying rudder and ailerons accordingly.

Then, etc., etc.

Controlling airplane is to keep or to change the attitude of the plane as smoothly as possible, by using every element of controls (with smallest applications).

It is very important to keep airspeed up and to pay good lookouts in air combats.

Of the prime importance was to keep high airspeed. On the first missions, you may not practice good look out for the enemy. There was an occasion I could not see anyone other than the section leader. I was in total fascination when I got my first kill. But

according to my wingman, a veteran NCO pilot, said to me that I was shot at twice by other Hellcats, and there were so many enemy planes all over.

If I have to look around whilst in the combat, though, I mainly used series of barrel rolls with the plane skidded all of the time.

I was instructed by pilots who were with vast experience that if one get through the first mission, he will live longer.

The more one gain experience, the better one can look out. If a fighter pilot gets through the first mission, then he will live longer, is same thing that other "aces" said.

4) Considerations for wingmen.

Be considerate to your subordinates.

The fuel would be low when on the return leg. The wingmen, as compared to the their leader, manipulate the throttle more times than the leader does, to stay in the position in the formation. This caused the wingmen to be lower on fuel. When I took the formation back from combat for the first time, I initiated a textbook type formation break right after passing the airfield. It had caused a distressed comment from one of my NCOs subordinate to me.

Textbook type formation break made a plane after another had to longer flight path, to take ample separation on the traffic pattern. This in turn causes each plane to very close to the limit of their fuel.

The leader of formation must take consideration to his wingmen so that they can land as soon as possible. That might look rather showy, it was actually one of wisdom to save time and fuel.

As a pilot of a tow plane, I normally take care of the pilot and the glider I tow. You must pay attention to what the formation's path will be. It is more like flying a huge airplane. A fighter pilot, who flew F-86Fs in JASDF, once wrote that if one has to lead the formation, he must be able to pay attention to the entire formation. In such formation, he should not apply full throttle, or some of his wingmen possibly could not to keep stay with the leader.

Lieutenant Yamakawa and his aviator watch

Shortly before special attack unit "Shichi-Sho-Tai" departed from Wongsang airfield, one day in early March in 1945, a young NCO pilot assigned to that unit approached to the Flight Officer standing at "Pisuto" and said that his aviation watch was out of order, asked for a replacement. While I hesitated just for a moment, Lt. Yamakawa, an experienced ex-NCO, handed his watch to the NCO at once. Only an experienced aviator like him could handle such situation by quick thinking.

The Swiss watch, originally installed in gun camera, was actually a stolen item. Yet,

most of the pilots did the same. At that instant, I was not quite sure whether it was right to give away such kind of item or not. (My watch, though no longer in working condition, is still in my possession. It reminds me of the lesson all the time).

Before I started flying, I was rather a slow person. But while in my training days, I did as some ace's say "Making a quick decision is better than to contemplate the best tactic". Through such type of personal training, one can no longer be a slow person. Today my wife even says to me "Do not jump to conclusions". I am quite used to making a quick judgment. But it took a lot more years than the case above. Concentrated training, harsh wartime environment and a person's resourcefulness and aptitude must have made these pilots become so.

I shall behave like Lt.Yamakawa, at my age.

As I see, the military training and education makes each different person to be able to do things in that way.

5) How to Fight

The more times you fight in the air, the better you understand it.

There had been so many cases of first timer's FTR (Fail To Return)

If you fight in the air as a Junior officer, assistance from NCOs is a must thing.

There were a host of experienced pilots in the unit. Some of them even had fought over Rabaul. I had made friends with many NCOs and on many occasions I was assisted, saved, and taught.

"Kotetsu" Tetuzo Iwamoto, Takeo Tanimizu and many others. Great flyers.

6) A tough Fighter Pilots

It was what we novices were told by Lt Jg. Tetsuzo Iwamoto after a mission.

On one mission we were attacked by F6F Hellcats from up, and I broke away and dove down. My wingman did the same and only Tetsuzo Iwamoto stood against the enemy. On the post flight Iwamoto said to us "You did a wrong thing to evade below. You must watch well what direction the Hellcat was flying. If his plane's axis was not directed toward YOU, you won't be shot at. If you watch that you will get away from his line of fire and then attack him from above."

Every pilot at Genzan-Ku wrote his name on the back of life jackets for personal recognition. In case of Tetsuzo Iwamoto, he wrote "Invincible Ko-Tetsu."

The most important thing when you go on a mission was to have sense of commitment to your duty.

7) Never give up when lost over the ocean- dead reckoning navigation

One day, on a return leg from Okinawa, I flew through a warm front, talking with a Rabaul veteran PO Yamaguchi who also had been flying somewhere nearby.

On one mission I met a warm front on its return leg.

Warm front is a weather advancing warm air covers retarding cold air by covering it. The boundary of two different weather fronts form a slope of about 5% of gradient, makes the cloud ceiling get lower and lower. I lost my position in the milk and had been flying and talking with PO Yamaguchi who was somewhere in the same situation.

The wing fuel tank became empty and I switched it to the fuselage tank for only thirty minute's flying. I nearly gave it up and because I did not like sharks, I had attempted to kill myself by shooting into my mouth. But I failed to squeeze the trigger.

Some years before I join the navy I learned at a Buddhist temple for a short course where I learned a part of the Sutra. I remember that part of sutra while I was flying, at very low level. A few minutes later a large cliff appeared dead ahead, and I dodged the part of the earth by turning steeply. That was a cliff of Kro-Shima, an island south of Kyushu and we normally used it as a navigational checkpoint.

PO Yamaguchi, a veteran from Rabaul, eventually failed to return. That had made me feeling deeply about life and death, and of one's fate.

Navigations in the navy normally consisted of dead recon and celestial navigation. All of the single seat fighter planes flew with DED recon navigation. When you fly according to this method, you must at first draw a line from point to point (course) on the navigation chart(s), and taking the wind aloft into account, you can get a heading (win Correction angle: WCA). If there are some crosswinds over the course, you can compensate the drift by making airplane's nose some degrees toward upwind direction. Our Zeros at F303 had lines in color RED, for finding WCA, drawn on upper surface of the horizontal stabilizers, much like those for Kanko and Kan-Baku. By aligning one of the lines with a crest of waves, so that you can determine the WCA. I show you here some of the charts I used for the actual flights.

This is for the first time for me to see real IJN Navigation Charts. These papers are priceless today. To compare with what we have today, these IJN charts have many land names, probably for the ease of navigations at that time. Hijikata's charts have very neat and clean course lines drawn by him, and I could not find any of useless marks and writings on them. This is quite different from aviation charts of my own, and these must have been his "life lines." The fact that F303's Zero had WCA lines drawn on upper surface of the tailplanes was also new to me.

We of course had radio telephone communication. But the performance was bad. We knew the USN change communication frequencies each other day, and sometimes ours and theirs were on a same wavelength. In that circumstances only voices in English

were heard OK, exaggerating the difference in performance of the radio sets. We at first used throat type microphone, it was then replaced with ones integrated with oxygen masks.

I heard that the frequency was changed by replacing crystal(s). Hence it was possible on the ground.

There was only one occasion I used the Morse codes for communication. While I was in Wong-Sang, I was also assigned as a squadron weather officer and had shared the office with squadron's communication unit. There I made friends with Com NCOs and had learned how to use Morse Codes.

One day I led a Special Attack Unit extracted from Genzan-Ku, for Kyushu. When we were out of the radio telephone communication, I received a Morse telegram message from radio boys at Wong-Sang saying " Attention: Mr.Hijikata Stop Good Luck and Best Wishes Stop."

Lt Jg. Matsuo Hagiri wrote in his book that he was in an engine room boy of a ship before he was selected for aviator's course. And had known nothing about the signals. After being selected as a So-Ren aviator course student, the service did not provide him how to signal. After becoming an operational pilot he had many troubles to communicate with ships showing their flags, banners and light signals.

8) I know how you feel (in a combat)

It was just like participating to a 100 meters dash. You cannot think about anything while you are running. No fears. Practically no enemy planes were in your sight.

Until the moment the starter pulls the trigger, you would have felt a lot of anxiety, or you may feel like to urinate. But, once the start pistol triggered, you would be running all out. You would not think about yourself. How you feel while fighting is just like that. On the first combat you can see nothing but your leader. "Just stick to me, no shooting."

In my opinion, Mr. Hijikata's explanation is better, and I can somehow understand it. I feel it is in part the same ways (never all) before I take to the air in an aircraft.

You will be all right once after you learn to operate cowl flaps during fighting. Just be used to it.

Pilot's human performance would easily be degraded once after the pilot suffered information overflowing. The more he gains experience the better he can lookout. The best cylinder temperature for optimum power output from Zero's Homare engine was

180 degrees Centigrade mark. If the temperature was higher than that, one would get overheating. If it was lower, the engine would not work out its best performances. Cylinder head temperature gauge was at the right hand lowermost corner of the instrument panel and hard to watch. If you get used to the fighting, and had become able to have time, for example, to operate the cowl flaps by turning the crank, you were all right.

He does not mean that whether if he could or not to operate cowl flaps during fighting. There were (are) a lot of items requiring monitoring and operating while the plane in the motion. He meant a pilot must have ability to cope with that all.

Early models of American P-38 had sophisticated aircraft system, much too complicated for novice pilots. A website about WW2 US fighters quotes a letter from a CO of a P-38 fighter squadron in ETO, complaints to his superiors about how demanding aircraft the P-38 was.

Very few novices lived through one's first combat sortie

No other person can assist or help a pilot in cockpit of single seat aircraft. In today's aviation one will see single seat aircraft among military aircraft, acrobatic planes and gliders. Being in a cockpit of a single seat aircraft will give a pilot a feeling of special kind. After the pilot closes and locks the canopy, he would be isolated from the element. I normally fly one of those "single seaters" and these types of flying are not easy to share with other GA people.

9) There were no fixed styles to fight in the air

IJN was so slow to learn the lessons. The lesson: to combat in the air as a group
Combating in the air with a pair of fighters (a section) was tested and utilized in China before Pearl Harbor. This tactic had been researched thereafter at Yokosuka Koku-Tai, a test unit of Naval Aviation. Of course it was based on what Germans had been doing. In the case of our squadron, it depended on how skilled the leader was. If the wingman had some doubt over his leader's skill, the wingman no longer trusts the leader (particularly in the case where both pilots were in same level of flying skill). And then the section would easily be broken. My strong impression was that the US Navy fighter pilots were very good at doing that tactic. They always flew in pairs.

I heard that the IJN policy was to whoever in higher rank would take command, regardless of how experienced the person was. In my opinion this caused IJN aviation's failure. If it had adopted the system to allow assigning experienced pilots to lead the missions, in my opinion, they would have less trouble. During Korean Conflict, USAF had system a novice pilot will fly his first 50 missions as a wingman, then he would lead a section, then a flight, or a whole wing depend on his experience gained and personal capacity. Very young officer pilot of LuftWaffe would fly his first missions under lead of experienced NCO pilots.

It must have been tough job for a young officer like Hijikata to lead many experienced NCO pilots for combats. It must have given him a great pressure and hard working.

1 to 1 fighting (Samurai match) versus group to group fighting

Samurai's 1 to 1 fighting had been normal Japanese style, I would say. But in reality, air combat was to fight by group to group. You will be attacked from your back.

Mythical Hineri-Komi maneuver had become IJN fighter pilot's pitfall by 1945. The IJN was slow and reluctant to introduce new tactics.

We only had trained Hineri-Komi and almost no other types of maneuver and/or tactics were practiced. Either there were no air combat maneuver with different fighter types conducted.

As far as I knew we did not incorporate new ideas, lessons and tactics into our training. We had not exercised air combat maneuver with different types of fighter at all. We had stuck to old fashion ideas. If you do Hineri-Komi while actual combat, it makes you standstill in the air for a fraction of a second, killing your precious airspeed, and would become an easy target. It was very important to keep up your airspeed (energy) during air combats.

When you fly the airplane you must be well aware of your total energy. The same is applied when you land the airplane. Energy of an airplane includes "height" (potential energy) and "speed" (kinetic energy).

What's Samurais had found when Mongolian Genghis Khan assaulted Japan in 14th century were totally different from what samurais were used to. (Twice the range of Mongolian darts and its group fighting tactics)

F6F Hellcat was a powerful airplane and the Zero couldn't catch it in diving flight. In almost of the case enemy will attack us from above, a great mix up. That kind of fighting were never places for tactic like Hineri-Komi. It is quite similar what happened when Japanese Samurai met Mongolian fighters for the first time in northern Kyushu. As per what they used to do, Japanese Samurai attempted a 1 to 1 "match" calling up single opponent fighter. But in that Mongolian soldiers shot up single Samurai with numerous darts.

Different calibre gun have different ballistic trajectory. That is, two 20 millimeter cannons and one or two 13 millimeter gun(s) in a Zero had caused troubles.

In my opinion, models of Zero fighter inherently had a shortcoming of having two different types of guns. I haven't heard same type of criticism ever said but having different types of guns had resulted in different types of ballistic trajectory. It was great trouble for us to use separate lead angle for each type of guns. In that respect American fighter airplanes like F4U and F6F had all same calibre guns, making the aiming very easy and simple. Enemy's many guns with superior rate of firing really scared us a lot.

In case of Zero 52, you could pull the trigger only for ten seconds to bullet's running out. After you used up the ammunition you want to run away from a mix up, when you would show your back to the enemy. If you do that you would be got shot down. So you had to keep on fighting as if you still have plenty of ammunition. It was really difficult to wait for a coming of good timing to run during the combat.

Multiple sources say that during Korean Conflict, Mig-15's firing seemed to have same kind of problem. According to these documents, while in air combat being fired at by Mig-15s, its 23mm shells passed above their head while 37mm big shells passed beneath. I strongly have felt what were the characteristics of Swiss Oelicon guns in the Zeros. British Spitfires possibly had same kind of problems with its Hispano-Swiza cannons and Browning machine guns.

I attacked B-29 bombers several times. There was not much advantage in airspeed if the fighters attacked the bombers from astern, and you'll be definitely got shot down. Attacking from directly above (2000ft) was very effective because the enemy gunner can see us just head on, the least of the profile of the Zero. Timing of the attack was important, requiring very high skills. Because of this only experienced pilots allowed to participate bomber interception. It was amazing that you could see your shots home on the bomber during diving and attacking into it.

One day in 1945, I and Tetsuzo Iwamoto attacked a B-29 caused it to pull a smoke first and one of its engines unserviceable. We chased the bomber over the ocean to Yaku-Shima island and eventually shot it down into the ocean.

10) Our fighting spirit

Toasting with a cup of water before every Special Attack escort mission. It was Japanese's traditions of expressing one's determination before going for a fight and to face with death. Each time I smash the cup against the floor, determined that "I will kill enemies and come back."

Pilot who started organizing his personal belongings in order, would soon become FTR. We water-toasted before each missions. It was farewell ceremony. Only a half of the squadron mates would return from the mission gave me strange feeling. In farewell ceremony I would crash a cup against the ground and determined that I will kill enemy and will come back. Some people arranged their piled up personal belongings in order. But, in almost of the cases these guys would be FTR on the next mission.

11) On the way back to officer's quarters.

Lt. Jg. Sugibayashi and I met an old woman and her possible granddaughter in the midst of rice paddies, on the route to our quarters.

In Kagoshima we have one of local's house, some distance from the airfield, as our living quarters. On one evening Sugibayashi and I were on the way back to our "house" when we met an old woman with a small female child. We just walk past them but suddenly and strongly I felt I would like to dedicate myself to that two people. I confessed what I felt to Sugibayashi later that evening. He said to me he had felt all the same ways. This is, in my opinion, how young Japanese men, including the ROTC, had

felt at that time.

According to Yoji Watanabe, on final days of the war, mostly young people, including ROTC officers, sustained morale.

The Emperor, the symbol of our beautiful country

I believe that so called "Emperor Banzai" where the Emperor was a symbolic of the entity of our beautiful country, beloved families and whole Japanese people. I have seen few people's death from airplane accidents. In most cases a dyeing man would call his mother's name shortly before his end. Mothers are strong and there seemed to be no places for son's fathers.

These are his honest words. I have nothing to mention about it.

12) No complaints useful against what you were given

I started fighter flying in Type 96 (Dual A5M), rather than Dual Zero. For the first time I experienced "G" force.

*Acceleration (Gs) during maneuvers

My first experience of acceleration was when I flew the Zero and one on an automobile test circuit followed, after the war.

Whilist in the air combat, you would apply strong Gs in each maneuvers, and as it increases, the field of the vision narrows proportionally to the G value applied. When you ease control stick a little forward, the G reduced and the field of the vision recovers. That is, the field of human vision (circle) would tighten and widen according to the G applied. As you repeat it, you would be quite used to it. Before a super highway between Tokyo and Nagoya complete (in later 60's) I had a chance to drive a prototype automobile at Mitsubishi Motors Co. on its test circuit road. When I drove past the car at the steepest banked portion of the circuit's curves, a factory test driver said to me that there were no amateur drivers to drive trough a car there.

At that time there were many ex-aircraft designers at Mitsubishi Motors, including Mr. Sone who had been an assistant to Jiro Horikoshi.

When I drive a car on a express way, sometimes I measure the distance between another car about 50meters in front of me, thinking that "oh, the shooting would be deadly."

Also, I am OK to expose myself to negative Gs while I take a ride in some of amusement rides. When you fly for exercise gun shooting, and after your firing run, you have to dodge the banner target by pushing the control stick hard forward, when you'll have strong negative G.

It seem to me that people in that kind profession somehow be used to things quite unfamiliar to me and other people. I never like to ride any kind of amusement rides with violent movement or sudden accelerations and decelerations. If you fly a small airplane, you would have bumpy ride, depends on the weather, mostly because of thermals, which often called "air pockets." Even a person in normal health will suffer airsickness.

13) Special Attack Unit

It was never an ethical ways of fighting the war. Honestly I would not like to "volunteer" for it.

I did not agree with it also, and honestly did not want to go for it. If I got shot down in the air combat, that's because of my flying skill inferior to enemy pilots' and I would be satisfied to take my own fate.

I am relieved to hear that Lt. Hijikata had lived with his own flying skills. As a private pilot, I always wish to improve my own flying skill and knowledge for to become a better pilot. I have been collecting anything about flying and study these materials on every possible occasion. When and my flexibility and eagerness toward learning as well as my dream for flying run out, I will quit doing it.

There were some ex-IJN high rank commanders who had planned and ordered Special Attacks, lived after the war having national pension being paid. I simply don't like it.

Me either.

How we applied "volunteer" for Special Attack unit at Wongsang-Ku

You will be typically seeing in some war movies, like "who wish to go for it may step forward." Actually it was not the case for us in Wongsang Ku. The CO opened the door of his room for three consecutive days and asked for us to submit papers mentioning one's own intention, no matter how he would like it or not. I submitted three papers mentioning I would like to volunteer for it.

I heard that aircrewmembers of an RAF unit consisted of Fairey Battle, in France in 1941, facing advancing German forces and almost unavoidable death if they attempt to attack against it. On one day they were offered a deadly attack mission, when nobody who did not step forward. There would be all the same under similar situations. In this case of RAF bomber squadron, all of the bombers went for to bomb a bridge, and were all shot down and one of the crewmembers, Pilot Officer Galland, was awarded posthumous VC.

Commander Okajima IJN, an unique person who resisted orders for forming Special Attack unit from the squadron under his command. Other example include Commander Minobe's Fuyo-Butai (Fuyo=Mt. Fuji)

Okajima-san did not allow to form or to extract Special Attack units from our F303 squadron. Commander Okajima, about 32 of his age, led the squadron usually being himself the leader of the formation. Normally IJN commanders were not supposed to fly but he did. As far as I knew Commander Minobe who led Fuyo Butai (wing) consisted of D4Y1 (1P) and Zeros, for night missions for Okinawa, did almost the same ways as what Okajima had done.

I have been interested in how old who led all were. A commanding officer should be old (and capable) enough to lead a group consisted of hot officers straight from Eta-Jima, young officers from NROTC, very young NCOs from Yoka-Ren and experienced "old-hands."

14) The motto of IJN officers and junior officer's disciplines

"An naval officer should be a gentleman who always thinks ahead, does things neatly and never gives up."

Young IJN officers normally use a "Junior Officer's Mess" on every ship or base. There were some rules applied but that following one rule was the best. It is still in my mind: "Teamwork first and avoid being separate from the fleet"

We young officers were told not to kick one's heel alone in the group and to ignore the teamwork.

15) Vine and Roses

Japanese traditional Tea Practice "Ura-Sen-Ke" and Buddhist's "Zen" were my main concern while I was in WongSang-Ku.

You should not love a woman too much. If you would like to have a good time with one, you'll do it with professionals and never do it with "amateurs."

It was never encouraged to make love with "amateur" girls or women. Only if you want to make her your own best woman, just go ahead. In IJN slang, "black" meant woman

in that kind of profession. "white" meant the opposite. If an officer make a touch and go love affair with a "white," he would be excluded and ignored even by his classmates. These kind of things regarded against ethics between Naval officers.

Unit song of F303 was recently in public on some Japanese websites. CPO Takeo Tanimizu originally wrote the lyric and PO Hamamoto improvised the melody by playing his harmonica, rendered it the song of our unit, F303. On one unflyable day I was asked to put the melody on paper by playing a piano myself, in a local junior school. The finished music score with lyrics was printed on a paper on the same day and presented to all squadron members and staffs.

16) Were our days happy one or not?

Mixing up of public and private things occurred in today's Japan. I believe someday people will open their eyerids.

In today's Japanese society, what had been "public" and "private" are quite reversed and mixed up. Society's order is not in its alley. These two things have to be balanced at some point and I strongly hope the proper balance to resume in the future.

17) The last words from Special Attack Unit aviators, left on a black board in their quarters in NAS Kanoya.

"I miss Jazz Music. I want peace soon."

"It is all yours."

Sometime after the war a book of various memoirs by university students who fought and dead, was published and became very popular, but it was full of left-wing stuffs. We ex-ROTC had felt something different and published another book. The book contains exactly what we had felt and our mind of duty at that time.

Loser died cleanly and beautifully

In Japanese history, Hei-Ke reign was short and brilliant, and had disappeared in the most beautiful ways. "That is the reason why I wrote a long story "Hei-Ke Monogatari" (The Story of Heike), having seen the resemblance to the lost war of this time." Eiji Yoshikawa, a leading novelist of all time Japan, once had told me about it long after the war.

My general impression

There is a saying "one who says big thing never be a great person." By listening to Mr.Hijikata's lecture today I felt firmly a confirmation of that saying. He had told the story of his own in very calm "I was there " style, giving audiences a great reality. He also said it was just a two year's experience, but he dedicated himself to it. "It was

my best days, had made what I am.”

Just paying a look today’s Hijikata would never realize one that he once had flown and fought so fiercely. He had his own air of being a reserve officer who helped and fought for the nation, during her most difficult days.

This is for the first time for me to listen to an ex-Zero pilot. I could catch and sense many good and valuable things elsewhere in his lecture. He is a real “Senpai.”