US Army Forces, Far East and the Philippines-

- Q: Clarence Renshaw was assigned to oversee the construction under then Colonel Groves' direction. What about Renshaw; how qualified was he to do this work and how good a job did he do?
- A: Renshaw was a very conscientious person and was put in charge of the projected construction of the Pentagon. I might add, just about this time was about near the end of my duty in the Design and Engineering Section. In September I received a cable from General MacArthur-he had been called back to active duty to command the US Army Forces Far East in the Philippines—asking if I was interested in assignment to his command as chief engineer of this new command. After contacting Dorothy, my wife, I saw General Somervell and said that I had decided to go.

He was quite surprised, and he said, "Now look, Pat, you're following, if you do that, you're going to be going to somebody who's reached the top and won't go any further, whereas you should stick with me, and I'm on the way to the top and I'd advise you to just carry on with me." But I said I preferred to rejoin General MacArthur. I thought this was a better opportunity to serve in case war was coming, and we all felt that was coming, so I sent a cable accepting this appointment and prepared to get ready to move out to the Pacific.

- Q: Could you briefly describe what the work in the War Department was like during 1941? It must have been fairly hectic.
- A: I think it could be termed possibly "very hectic." The War Department in peace times sort of goes along in normal fashion, and all of a sudden there's a great expansion of activity, and with that many new responsibilities. That means that they probably had to call in new personnel or expand the personnel along with an abrupt addition of duties and responsibilities. I think that there were many problems in connection with adjustment to this new situation, including coordination between and with some of the agencies in the War Department. An example was with our Construction Division as in connection with funding the locations of cantonments and industrial plants, and problems such as that [and] also with the different service chiefs, as in the Ordnance [Chief of Ordnance], in connection with ordnance facilities and

so on. Our relationship with the Quartermaster General, however, was not a problem in that connection. We were at that time actually a unit of the Quartermaster General's department instead of the Chief of Engineers.

Later on the responsibility for all military construction, both peace and war, was assigned to the Corps of Engineers. Wartime construction in the overseas theaters, even at that time, was the responsibility of the Corps of Engineers. But in the States it was the responsibility of the Construction Division of the Quartermaster General. I think by reason of the situation that developed, authority and responsibility for construction throughout the country, as far as military requirements were concerned, was later transferred to the Corps of Engineers, where it was a good place to have it.

- Q: What was Washington like during 1941?
- A: I don't have any special thoughts in connection with that. There was a great expansion of activities, in the military particularly, but I think things were otherwise going on almost as normal. I don't think they were quite as sensitive to the approach of conflict as we in the foreign theaters felt. For instance, when I was over in the Philippines later on, I felt that the concern in Washington was much less than what we and those in other areas that were directly affected by the impending conflict had.
- Q: Was there any organization or person that gave the Construction Division, or you, particular difficulty during 1941?
- A: No, I wouldn't say so. Not that I recall.
- Q: Were you given any special preparational instructions by the War Department or the Chief of Engineers when you left for Manila?
- A: None. None at all. Not by the Chief of Engineers; not by the War Department. I just had orders to proceed there. No advice. No information. Nothing. I just had orders. And I was ordered to fly, so I flew to the coast. At that time we had only seaplanes-the Pan American Clipper-so you didn't make a direct nonstop flight to the Philippines. From the coast you'd take a flight to Hawaii and then to Midway, Wake Island,

Guam to Manila. It would take five days by Clipper to get from San Francisco to Manila. Actually I was delayed two further days because of plane difficulty in Hawaii and weather difficulty in Guam.

- Q: On your way across the Pacific, you stopped at a lot of American outposts like Hawaii and Guam. Did you sense any anticipation of trouble with the Japanese by the military officials or naval officials you talked to?
- A: Not particularly, no. At Hawaii Colonel A.K.B. Lyman, then department engineer, who had been over me as district engineer in Boston, had me stay in his quarters during my stopover. In the ordinary sense of preparation for war, you didn't feel any sense of hysteria or concern. I think they had the attitude, which all of us felt, that if anything was going to happen in connection with Japan, they were going to hit the Philippines first because Hawaii was a far distance away. I think they probably felt that the warning would come from attack out in the Philippines rather than on their doorstep.
- O: What did you and MacArthur discuss when you reported in October 1941?
- A: I think it was a very brief meeting. I had served with him for three years before. [assume that he knew what I had done. He greeted me and indicated that we were in a condition of preparation for greatly increasing the defenses of the Philippines, stressing that there was an urgent need for airdrome construction for the air forces that he contemplated receiving. And then sort of said, "Well now, Pat, just go to it."
- Q: So there was no discussion of plans?
- A: No, no discussion of military plans or anything. Just a cordial greeting of welcome on my return. In accordance with policy that he had shown previously, he said, "This is your job, now you take care of it." But there were no specific directions as to how or when or why.
- Q: Was this typical of MacArthur throughout your experience with him during the war? To just give you an order and rely upon you to carry it out without detailed instruction?

A: I would say generally that was so. For example, it wasn't his custom to call in, let's say, some Army commander and give him all the details as to how he was going to conduct his campaign. He would prepare operating instructions to a command for our subsequent operations. Most of our operations subsequently involved the landing and taking over an area, building an air site there, using that as a base for the next advance, and so on. In each case such as that, orders were issued to the task force commander including specific details as to the type of field, number of hardstands, and certain other base requirements.

Q: What did you do first after you had talked to MacArthur?

A: Well, the first thing I did was to go down to organize an office. One thing I was lucky in. I had served, as you know, with the National Power Corporation. I had had a Filipino secretary, a man secretary, a very capable stenographer, and so I contacted him and engaged him as my secretary, and it was very, very helpful to have somebody to whom you could give dictation and who could handle it rapidly. Because among the enlisted personnel it was exceptional at that time to find someone who was a qualified stenographer.

I, of course, contacted the staff in connection with the general situation, particularly with G-4, General [Arnold J.] Funk, who was then also a lieutenant colonel. Later on, after the fall of Corregidor, he was captured and made a prisoner.

My principal problem or concern then was to advance the construction of the airdromes that we were improving or building in the Philippines. We were expanding the major Clark Field installation and had many other airdromes that we were developing or improving.

One of the difficulties that we had was that as it was still peacetime and the Philippines was a commonwealth, in order to get, for instance, land for an airdrome site or its expansion, we had to go through the usual peacetime procedures of contacting the land owners and making arrangements for the right-of-way or acquisition of the property, which caused obstructive administrative delays.

There also was a shortage of the large general contractors such as you have in the States and a shortage of heavy construction equipment. One possibility for such equipment was with my former Caliraya project. When we built that large hydroelectric earth dam there was no heavy construction equipment in the Philippines. As I previously indicated, instead of calling US contractors to build it at greatly increased cost, we went out and procured, for the National Power Corporation, large earth-moving equipment. We acquired tractors and dozers and large trucks, and indicated in our call for bids that this construction equipment would be made available to the successful contractor, thereby permitting the various Philippine contractors to bid. So we'd widen the area of competition, which was one reason that we got very good bids.

That meant that the National Power Corporation had all this heavy construction equipment, and so one of the first things I did was to arrange to acquire for the United States Government this construction equipment, then about to be surplus. By various and sundry means we would acquire the materials, equipment, and whatnot in order to expedite in every way possible the construction of these airdromes. We also were busy with the Philippine Army phase in constructing or expanding the cantonments or camps where the Philippine Army divisions were going to be located if, as, and when they were mobilized.

- Q: What were the conditions of the defenses of Manila Bay and Subic Bay when you arrived in October 1941?
- A: Corregidor had been built as a major permanent fortification, provided with heavy seacoast artillery and whatnot. But similar to the situation down at Singapore, its artillery, guns, and armament and so on were pointed to an attack from the sea. Their defenses were against a naval force coming in from Manila Bay, and not from an operation over on Bataan. It was the same situation in Singapore, where they were protected against a sea offensive but not against an attack from the land.

Later on the Japs came down on the land and took Singapore in relatively short order.

But the War Department had finally come to a decision that it was necessary or desirable to increase the defenses out in the Pacific. Prior to that time,

anticipating independence for the Philippines, it had been the policy to sort of let things go. Nothing had been done in the way of improving any of the armament or other military facilities in the Philippines. They were just on sort of a maintenance basis. But shortly before I arrived, the decision had been made to actually and aggressively increase the defenses.

Many troop units were organized to be sent out to us in the Pacific. Additional armament, guns, and other equipment were on order and would be sent out. Additional air units were scheduled to come, and that of course meant the building of additional airfields and their improvement. The signal facilities were also scheduled to provide radar protection and so on, and preparations for all of this were under way at that time.

When war broke, it had not been accomplished. I think if we had had three or four months more before the war actually broke, we'd have been in a much better position for defense. But as it was, we were sort of in the initial phase of defense reinforcement when the war did break.

Corregidor, I'd say, was in very good shape, as I said, other than that it was not prepared for a land attack as compared to a sea attack. Corregidor was well protected and equipped to withstand, let's say, a naval approach into Manila Bay, which had been its primary and initial purpose. With the development of air power and the potential for bombing, an installation such as Corregidor or other similar installations became more vulnerable. But the tunnel structures throughout the island were very formidable and could and did withstand much heavy aerial bombardment.

Q: Did you ever go out to look at Fort Drum?

A: Yes. I think I just went out one time and observed it mainly as an item of interest. I didn't think it was something that was a sensational or key element of defense.

Q: It was sort of an oddity then?

A: Yes.

- Q: Apparently it held out very well.
- A: Yes, it was a good facility, but I don't think other than what you would normally have in providing a defensive installation on an island.
- Q: Despite the fact that the current war plan, which was called Orange 3, specified a defensive war in the Philippines based on Bataan and the fortified islands, very little work was actually done on the Bataan defenses prior to the war'?
- A: Well, even under the Orange Plan, I don't think anything had been contemplated particularly on the provision of major defenses in Bataan. Nor at that time were we doing anything to increase the defenses on Bataan other than airdrome construction and so on. The plan contemplated that we would delay the advance of the Japanese to defense positions on Bataan in order to secure Corregidor from the land. We were to conduct a normal defense operation with what troops we had on Bataan, and for a temporary period, because it was anticipated that it would be merely a delaying action and then the Navy and other reinforcements from the States would be sent on over and they'd be the real force to conduct the subsequent operations.
- Q: MacArthur and George Grunert, who was the Philippine Department commander, made quite a bit of progress improving the defenses of the islands in 1941. How much of progress in improving the defenses in 1941 was Grunert's effort?
- A: Well, prior to MacArthur's being recalled to active duty, it was all Grunert's effort, because MacArthur's function then was only as military adviser to the Philippine Commonwealth and to develop the training of the Philippine Army. When MacArthur took over, it was his responsibility and that of my office as far as airdrome construction was concerned.

Prior to that it had been under the department commander, General Grunert, and his department engineer, Colonel Stickney. Lieutenant Colonel Mielenz was his deputy. Colonel [Roscoe] Bonham of the Philippine Scouts was an assistant on supply; Major (later Colonel) Wendell] Fertig, an engineer reserve officer, was also on duty with them. Major Fertig was the

operations chief who supervised most of the airdrome construction that was under way at that time under the department engineer.

- O: Did you know much about Grunert?
- A: I had met him during my prior detail there. He's a very pleasant person. I had no real official dealings with him at that previous time, but he was likable. I don't know of anything particularly in other respects.
- Q: Although the War Department and the Army Air Forces placed a great deal of emphasis upon the B-17 as an important part of the defense of the Philippines, little was actually accomplished until late 1941, due partly to the lack of funds to build airfields but also partly to the lack of knowledge of how to build airfields for an aircraft that large.
- A: I doubt the latter. I think the fields that were done in the Clark Field area were adequate for B-17 operation. Not all the airdromes that were contemplated were designed for B-17 operation. You have to keep in mind that some fields were primarily for bombing operations; others were for fighter aircraft. If you were building fields for the lighter fighter aircraft, then you're not going to take the additional time and expense and materials to develop, let's say, a B- 17 type field, because it would probably take twice as long and you'd get the field only half done by the time it was needed. So you had to reduce the standards to ensure that you could complete as much as possible in the way of airfield development for whatever purpose it was intended, rather than to go in for peacetime construction on every one of these airdrome sites, which would be crazy.
- Q: On the standards of construction for a B-17 field, what were your priority considerations? Strength of the pavement, subgrading?
- A: Well, we had numerous factors. You had to be assured of your approach and takeoff in connection with the flight angle. You had to be assured of a good foundation in the selection of a site, not get one that's in an area where you get a lot of seepage and mud but try to get an area that's relatively well drained and with adequate width and length. The Air Force would like to have a field as wide as possible and as long as possible. As I say, those

have to be tempered by your capacity to attain reasonable standards and the effort involved in doing it.

But I think we reached reasonable standards on the length and width of runways, approach conditions, and the type of surface. And that did not mean going in for 18-inch concrete, but it meant using the materials that were available, such as macadam. For example, if you have a good foundation, adequate drainage and surface, it would withstand your anticipated military traffic.

- Q: Did the Air Force officials in the Philippines understand the difficulty of building these airfields?
- A: In general, no, although I don't think we had too much difficulty with that at that time. However, you talk later of the loss of MacArthur's B- 17s on Clark Field almost immediately after the war broke. MacArthur had issued orders to General [then Major General, later Lieutenant General, Lewis H.] Brereton, the Air Force commander, to remove those planes down to Del Monte in Mindanao. If they had, they would have been safely out of bombing range of the Japanese air forces on Formosa and would not have been destroyed. MacArthur felt that from Mindanao they might refuel at Clark Field and then proceed to any other bombing mission they were to undertake.

The Air Force felt that the field down at Del Monte, Mindanao, which we were building, was not fully completed-it did not have an officers club. The Air Force liked to have an officers club in connection with its airfield facility. It did not have some of the other perquisites, you know, like good living conditions, big barracks, or special facilities for the personnel. But for wartime operating conditions or similar, the facilities we had there were operationally adequate. In fact, it was later so proved by those planes that did go down.

But I believe the night before Pearl Harbor the Air Force was having some big celebration and whatnot for personnel who were returning to the States, and that may have been a factor in holding up their move until that was over. I know they were going to move within the next day or so, but the next day was too late, because that was when they were hit.

I can recall shortly before being in General Sutherland's office. General Sutherland asked me what was the condition of the field down at Del Monte. I told him they were operable but lacked certain facilities and soon, and I recall his immediately getting on the phone, calling General or Colonel [Brigadier General Francis M. "Ray"] Brady, Brereton's chief of staff, saying to him, "Goddammit, you know General MacArthur ordered those B-17s down to Mindanao," some days before, and he almost indicated 'why the hell weren't they down there and we want them moved. "I guess they planned to do it Monday, after their big party or something else, but in any case they were on the ground when the Japanese hit.

General Brereton indicates that he was ready to take those B-17s north the day the war broke and wanted to attack Formosa. If he did, he'd have had to do it without fighter escort, and I hate to think of what would have happened to them from the massive Japanese air forces on Formosa at that time. I don't know the details as to what happened as to such [a] request. I think he was not granted the permission to do so, and he claims that that's the reason why he lost the B- 17s. He indicated that if he had been permitted to go up and bomb Formosa, it would have been entirely different. However, if he had conformed to orders to move his planes down at the time MacArthur ordered him to, they would not have been lost. Furthermore, if they had taken normal precautions, particularly as we did not yet have radar coverage, which was contemplated and projected, and if he had kept some fighter planes up as coverage, let's say during the noon hour when all the pilots were in having lunch with all the planes lined up, the Japs might not have been able to come in and destroy everything.

If they had kept some reconnaissance or fighter planes up to provide security, and the B- 17s could have taken off prior to the attack, then the situation would have been different. This is not according to Brereton's story, but I think, insofar as I saw it, that was the situation.

- Q: What was your opinion of Brereton?
- A: Not overly favorable. I recall when he first came in. He went through the office facilities that we had, and I think he had a swagger stick with him to help him to sort of indicate that "I want this changed and this out," and so and so, all in a very brusque manner. Later on we had this incident, the loss of our planes. Then when we moved over to Bataan, I can picture his

office. He was there for just a short period, but I can still see a map which showed Australia. Thousands of miles down in the southwestern part of the map, in the Perth area, was his projected location for his Air Force headquarters. It sort of indicated that his plan was for moving on down, and he was going to have his headquarters location down there. Well, that was so far removed from our potential combat areas that I just could not understand what it was all about.

Anyway, later on he moved out and left the Philippines, left Brigadier General [Hal] George, General "Pursuit" George, a very fine officer, to be in charge of the Air Force efforts. Later on Brereton was assigned, I believe, to the India Theater, and I remember later seeing a picture in Life magazine which showed General Brereton seated at a mahogany desk with a pen and so on, with a subline underneath which said this was a picture of General Brereton, the new commander of the Air Force in the India Theater. It said that at the time this picture was taken, 'he had more air conditioning units than he had planes." I thought that little squib, to my mind, typified some of the characteristics of Brereton, or so I sensed. Later on I heard of the Ploesti Raid that he directed, and I do recall that there was a tragic loss Now, whether or not the results of life and planes on that raid. accomplished merited the losses, I don't know, except it was one of the operations that Brereton conducted in the European Theater. But by and large, I thought that there were many other Air Force commanders better than he.

- Q: Did you know Francis "Ray" Brady, who was Brereton's deputy at that time?
- A: I knew him just casually; I don't recall any great detail as to the matters we took up with him, other than my previous reference to Sutherland's telephone call to him.
- Q: Do you believe that your previous tour in the Philippines and your knowledge of MacArthur and your recent experience in the Construction Division allowed you to move more quickly and effectively when you did become the engineer in the Philippines?

A: Yes, I would say so. With increased experience and increased knowledge, one naturally should be better qualified. I was in a little embarrassing spot. At that time I was a lieutenant colonel, even though under Somervell's office they were in the process of having me promoted to colonel, and in fact some such word came to me as I was en route to the Philippines that my promotion had gone through, but it had not. When I debarked at Manila, I was a lieutenant colonel. Colonel Stickney, a full colonel, was Philippines Department engineer, and here he was under me, and I was a lieutenant colonel having to issue instructions and directions to him, which made it a little difficult, I think, on both sides. However, he cooperated very well, and we had an excellent mutual understanding and relationship.

One other thing which I think helped greatly was from my previous experience in the Philippines. The National Power Corporation had on its board of directors the director of public works, Mr. Fragante; the president of the Manila railroad, Mr. Paez; and other prominent government officials. So I got to know them as a result of my dealings with the National Power Corporation. I also got to know a number of officials in the Public Works Division, their district engineers, and so on. And later on, after the outbreak of war, I had to make many direct contacts, for instance in taking over the Manila railroad, which we did, and the fact that I had a good personal relationship with Mr. Paez was very helpful in that. The fact that I knew the director of public works and their district engineers was very helpful in connection both with the construction and also particularly in connection with our demolition program after activities broke out. My prior contacts with Philippine Army headquarters, and in particular with their Corps of Engineers, were especially helpful.

- Q: Despite the importance of defense projects in the Philippines, supplies, equipment, spare parts, construction materials, all moved very slowly to the islands. Was this due to distance alone or was it due to a combination with competition from lend-lease and other high-priority defense projects?
- A: I would say it was a combination of many things. I think the administrative procedures, the procurement, the problems on priority of transportation, and I think the priorities of other military construction needs within the United States-on their construction program, for example—and other matters such as that affected it. That was one of the reasons that we resorted to the maximum to local procurement of whatever we could get; for instance,

lumber from the lumber mills and such things as were manufactured in the Philippines, and procurement of all other items and equipment that we could get there.

- Q: Although MacArthur finally did request and receive from George Marshall a higher priority for the Philippines, it came too late. Do you think that more could have been done in Washington to aid you?
- A: Well, first of all, if people in Washington knew war was coming on a certain date, naturally much more would have been done more expeditiously. I think that with peacetime procedures and activities, they operated in more or less a routine way in doing things. For instance, I had had a number of requisitions pending in Washington for equipment and materials, and so on, particularly for our airdrome construction program. I recall maybe three or so days before the war broke, I was so concerned about their delays that in the clear, rather than in code, I got on the overseas telephone and even called the Chief of Engineers' office in Washington, and I listed a lot of the critical items, indicated the urgency, urging them to try to push things forward as fast as they could. That was indicative of one of my concerns about trying to expedite delivery of critical things that had been on requisition for some period of time.
- Q: You say you called the Chief's office. How frequently did you get into direct communication with the headquarters in Washington?
- A: That was the only time that I did by overseas telephone. MacArthur's headquarters and some of our staff probably were in such communication with other War Department offices. That was the only occasion, outside of wires and correspondence. What I was indicating was sent in the clear, and if the Japanese were listening in, overhearing the urgency of our needs here, they could easily get that. But I felt the need was so urgent that I was on the phone quite some time, listing all of these problems.
- Q: The arrival of the 803d Engineer Aviation Battalion and then the 809th Engineer Aviation Battalion eased the situation somewhat, did it not?

- A: Greatly. They were the first, you might say, organized and equipped and trained units qualified for that specific task. If we had two or three or four more of them, it would have been very helpful, or other similar construction units of the Corps of Engineers, of the Army engineers. At that time the Air Force was under the Army, so the aviation engineer units were really, you might say, also Army construction units.
- Q: The only Army engineer unit you had until the arrival of these two units was the 14th Engineers (Philippine Scouts)?
- A: Part of the Philippine Division.
- Q: How good a unit was that?
- A: It was excellent. The whole Philippine Division was excellent. These were Philippine troops, except for one white regiment, who had enlisted, and they It was considered an honor to belong to the were very, very loyal. Philippine Scouts. They routinely reenlisted, and there was a strong sense of loyalty and patriotism. They were an excellent unit, including the engineer regiment. It was unfortunate that just prior to the war the War Department changed the organization of the square division to a triangular division, and instead of the four infantry regiments of two brigades, they changed to three regiments, and in doing it, they reduced the engineer unit to a battalion. I strongly feel that every division needs at least a regiment, or several battalions, of engineers in all operations. We had just the single battalion that went with the division. Throughout our subsequent operations, it was always necessary to supplement the divisions with additional construction battalions or comparable-type battalions that could give them additional engineer support capacity.

When they did break up the regiment, the Philippine Scout engineer regiment, we did have one advantage from it, as I previously stated, and that was that certain key personnel became surplus, whom I assigned to the engineer units of the Philippine Army. They served as key personnel within these various units and greatly strengthened those otherwise relatively untrained and unequipped Philippine Army engineer units.

- **Q:** What do you think of Lieutenant Colonel [later Colonel] Harry A. Skerry, who was the commander of the 14th Engineers?
- A: Colonel Skerry. Skerry was a dedicated, loyal officer and performed very well commanding that regiment. Later on, of course, he became engineer for General Wainwright's force, and as such also performed very well. I think he could have been a little more imaginative in anticipating certain problems and so on, but when given an assignment and certain things to do, he performed very diligently and effectively.
- Q: As part of his overall plan to defend the Philippines, General MacArthur ordered a buildup of the Philippine Army to some 12 divisions. In turn, he ordered you to develop an engineer force for his new army. Was your advice sought on the mobilization plan?
- A: Not particularly, except in certain details, such as the problems of cantonment construction and facilities for the arrival and training of these units. I don't recall any instructions specifically to develop an engineer force from the Philippine Army, other than the division organizations.
- Q: How long do you think it would have taken to train the engineer combat battalions and other engineer units that would have been necessary to support such a force?
- A: From the Philippine Army? Oh, I'd say at least three to six months more, because they were relatively untrained when they were called back into active duty. There would also be a major need for engineer equipment and transportation.
- Q: We were discussing the plans that General MacArthur had to expand the Philippine Army. Do you believe that in the situation you faced in late 1941 that his mobilization plan was a little unrealistic?
- A: I would say so. I'd say the basic plan was. First of all, it contemplated that the Philippine Commonwealth would appropriate the necessary funds to carry this program through, mainly to develop, to organize and train ten divisions each year for six months, and then this personnel would go on

reserve. Then they would train a new, similar increment over a ten-year period, so that ultimately you would have a million men, less attrition losses, that would have received some training.

But the facilities were limited, personnel were equipped just with hand arms, there was a lack of equipment and a lack of transportation, and a lack of funds to get equipment. The plan was to develop also a small naval force, limited just to PT [patrol torpedo] boats, and I think they got only four or so by the time that war broke out. The engineers had very little in the way of equipment other than hand tools. We were also to develop a small Philippine air force.

- Q: You were apparently aiming for a force of Philippine engineers equivalent to approximately 20 percent of the Philippine Army, but you had barely 5 percent by December 1941. What was your view then, and what is it now, of the proper proportion of engineer troops to all Army forces in an operational theater?
- As indicated in our subsequent theater task force operations, the engineer complement ran from 20 to 50 percent. Each operation was primarily an operation to land, take an area, and develop it as a base including major air facilities. In other words, the engineer mission was the primary objective or purpose in each specific operation. I think that it would be desirable to have a larger engineer percentage in our military establishment than we have currently. I think that it would be very desirable to have an engineer regiment instead of a battalion in the division. I think also that much could be done in the organization of other engineer units.

For instance, equipment is vital, and the operation of equipment is even more vital, and yet the organizational setup provides for but one operator for each piece of equipment, instead of two or three. In time of need that equipment is going to be utilized on a double- or three-shift operation, and you are going to need more than just one qualified operator. There is also a need for engineer maintenance units, because in time of war equipment is operated by relatively untrained personnel, and it is operated under great stress, often round the clock, so that maintenance needs increase. There is a need for special units like engineer parts companies and engineer equipment companies to have a reserve of equipment available to serve additional requirements on special situation.

- Q: When MacArthur became commander of US Army Forces of the Far East in July 1941, he left the staff of the Philippine Department as a separate headquarters. We have talked about the problem you had supervising Colonel Stickney. What other problems were inherent in such a dual staff structure?
- A: I really didn't have any problem with Colonel Stickney, other than it was sort of a little embarrassing situation. I think that our relations worked out quite well. I don't know of any major difficulties that we had. I think it functioned relatively smoothly. I think it would have been better if we had the staff headquarters of the Engineer Department as part of our command structure. But the way we worked, with direct communication rather than through command channels, it still worked out very well.
- Q: On 26 November 1941, the War Department notified MacArthur that US-Japanese relations were deteriorating and that troops should be alerted to meet any surprise attack. What actions did you take in response to this information?
- A: I think those instructions were issued to the commands, in secret to the senior commanders. I don't recall when they mobilized the Philippine Army divisions, but I know that possibly a month before we had called into active duty the engineer units of the Philippine Army divisions because there was a prior need for them in connection with developing the cantonments and camps where the troops were going to be received and set up for training.
- Q: As an important member of MacArthur's staff, how much did you really know about the worsening relationships with Japan?
- A: Not as much, I think, as I could have received, because much of it was top secret, such as the extent of the worsening relations with Japan and instructions from the War Department-they didn't make copies of that and distribute them literally to the staff. We just sort of knew that a critical situation was developing.

- Q: Do you think that there may have been a little too much security consciousness in MacArthur's headquarters?
- A: Possibly.
- Q: How much do you think MacArthur knew about the Japanese intentions or his estimate of the situation?
- A: Well, he sensed that war was pending, and the fact that we were stressing defensive preparations was indicative of that, and the instructions from the War Department supplemented or confirmed, probably, what his views, original views, were.
- Q: How well did MacArthur get along with Admiral Thomas C. Hart and the naval officials in the Philippines?
- A: I think relations probably could have been closer. I think MacArthur felt, as when he was later Supreme Commander where he had the Navy also under his command, that he would have preferred that rather than to have Admiral Hart and his naval force operating as a separate command. It meant that there were sort of requests made from one to the other, rather than instructions. So in other words, MacArthur did not have control of the small naval force that we had out there. It was all directly under Admiral Hart. I also think they could have and would have been used more effectively under General MacArthur.
- Q: Do you recall how and when you were notified of the Japanese attack on Pearl Harbor?
- A: I recall very well. I was asleep in my quarters at Military Plaza, and early in the morning on Sunday, December 8th our time, I was awakened by Spencer Akin [then Brigadier General, later Major General, Spencer B.], the Signal Officer, who shook me and wakened me and said, "Pat, get up. The Japs have attacked Pearl Harbor."

Now, Spencer Akin was one who had a soft voice, but under stress, when he was really under stress, as he talked, his words would come out in sort of a hoarse dramatic whisper, as though it were a whisper. Anyway, he was shaking me and telling me this, and I got up sort of surprised, and I said, "Well Spencer, why are you whispering? Don't the Japs already know it?" Whereupon he sort of shook his head. But anyway, that was how I was advised. So I got up General Sutherland, our chief of staff, who also lived in our quarters. We all got up. I know he took time to shave, Sutherland did, and we all then proceeded down to MacArthur's headquarters at 1 Cane Victoria. Naturally we were extremely busy from then on.

- Q: What was MacArthur's first staff meeting like?
- A: I don't actually recall that he called a staff meeting. I think we were all going about it in our own individual areas of responsibilities.
- Q: Do you recall what his initial reaction was, or his attitude?
- A: No. I think it was sort of an analysis of the situation. I don't know what specific direct action he took, either in communication with Washington or other headquarters. I know he furthered the advice and information to the major commands, to the Air Force headquarters, to naval headquarters. The Navy had gotten separate instructions through their channels. But I think those communications were going on between the senior commanders and our headquarters.

As I said, I don't think it was one of hysteria or anything like that. It was one of surprise to all of us that the Japanese had chosen to attack Pearl Harbor rather than the Philippines because we thought we were going to be number one—as I think they also thought in Hawaii.

- Q: Do you think that had the Far East Air Force survived the early air attacks at Clark, Nichols, and Iba fields, it would have changed the situation for the Philippines in the long run?
- A: It would have, though possibly not in the long run. I think if there had not been a Pearl Harbor with its destruction of the Navy, it would have changed it in the long run. But survival of our aircraft would have materially assisted our situation in the Philippines.

For instance, if we'd had those B- 17s, they could have been used to oppose the Japanese landings two days later at Vigan on the northwest coast and also at Aparri on the eastern north tip of Luzon. As a result, when the Japanese did attack, we had no airplanes to use against them. Unfortunately, Admiral Thomas Hart, I guess having lost our principal Navy force there in Pearl Harbor, was not taking his limited naval force and opposing those landing forces. So the Japanese had unopposed landings when they did land at Vigan and Aparri.

- Q: MacArthur's strategy, which was adopted when the war began, was to go as far forward as possible and then withdraw rather slowly in front of the Japanese and keep them as far back as possible from the defense position, which was going to be Bataan. How did this alter the engineer plans for fighting the war?
- A: His original concept and hope was that if the Philippine Army developed a large enough force, they could oppose the Japanese at the beaches. Well, that was absolutely impracticable and impossible at this time because any real capable landing force could make a successful landing against the limited forces which we had. I think that was recognized after they did make the landings—that our principal objective was to delay the advance of any of these Japanese elements and withdraw ultimately to a defensive position on Bataan, such as had been contemplated under the original so-called Orange Plan.
- Q: Was MacArthur at all surprised at the speed with which the Japanese made their initial landings on Luzon?
- A: I don't think overly so. I do recall, though, that very early on the day of the landing I got word that the Japanese had landed up at Vigan. I proceeded i m mediate] y down to headquarters. I got my Filipino secretary and I dictated an estimate of the situation and a decision and then formulated a number of telegrams to complement them. I believe this was the first, and as far as I know the only, formal "estimate of the situation" and recommended "decision" in our Philippine operations.

This was in advance of any action by G-3, G-4, the operational division of chief of staff [then called War Plans Division and later redesignated

Operations Division (OPD)], or anybody else. I recommended, one, that we not send any of our forces up to oppose that landing force as they could be cut off by subsequent landings southward, trapping them between the coast and the mountains; [two], that we take a defensive position up on the Lingayen Gulf coastal area and the mountain passes eastward, and [three], that we issue instructions to the Bureau of Public Works to their district engineers and also to the Philippine military district commanders to destroy the bridges and ferries between these landing areas and our suggested northern defense line.

I had wires prepared to send to the district commanders of the military districts and to the Bureau of Public Works. I had previously issued instructions to commandeer the explosives from the mining companies, particularly up in the Baguio area and other areas of the Philippines.

I had just about finished that when General Sutherland came in. I showed it to him. While I was showing it to him and discussing it, General MacArthur arrived, asked what we were doing. Sutherland said, "Pat has this." MacArthur read through it and without change put his approval on it with his standard "Okay, Mac." And we issued those instructions. I still have that document.

You might say that the chief engineer made the first "estimate of the situation" as to action to be taken after the first Japanese landing. That decision was accepted and the wires were sent out, all of which really should have been the function of G-3 with G-4 and others, including the chief of Staff.

- Q: The nature of MacArthur's strategy placed a great deal of reliance upon the engineers and the plan that you developed that day, especially for the destruction of major bridges, railroad bridges, road bridges. How did you go about collecting up the civilians that you eventually got and were named "Casey's Dynamiters"?
- A: I first contacted the mining companies. I knew the mining engineers were a good type of personnel, let's say, for demolition missions particularly. Many of them came voluntarily into my office. I would question them. One might say he was a superintendent or a foreman or such-and-such. I said, "Right, you're a captain, you're a lieutenant, you're a sergeant." I

commissioned them directly and personally, subject to later approval and confirmation-of course not standard military procedure.

I had indicated previously to the Philippine Department to commandeer all available explosives including the explosives the Bureau of Public Works had. We also had told the military district commanders and others throughout the Philippines to get these explosives and demolition supplies from the different mining companies.

I organized then these demolition units either to go with other military units or to be sent off on specific missions. For instance, I sent one up to destroy a most important pier installation at Masinloc up in the northwest. I sent the others with the forward forces, North Luzon and South Luzon forces, that were covering the withdrawal. The engineer units that were with the Philippine Army divisions were also given the mission of destroying the bridges as we withdrew from the successive positions. They were furnished explosives and technical assistance from the so-called" Casey's Dynamiters."

- Q: Apparently one of your most important helpers was a Mr. W. L. McCandlish?
- A: He was a very, very, fine and able individual. He was a representative of the Hercules Powder Company. I think he voluntarily came in to lend his services. I set him up as sort of my principal explosive engineer and had a number of these demolition parties operating with and under him. I sent him off on specific missions, some to supplement the North Luzon Force, which was withdrawing from the Lingayen area, and with other demolition groups that were sent down to supplement the South Luzon Force that was withdrawing north from their positions.
- Q: What was your relationship with Colonel Harry Skerry, who was Wainwright's engineer, and Lieutenant Colonel 'William C. Chenoweth, who was General Parker's engineer?
- A: I fortunately was in the position where I could issue instructions and directives to them directly, rather than having to go through our headquarters, General [Jonathan] Wainwright's headquarters, and then from him to his engineer command. So we were in constant telephonic

communication in connection with their problems and their needs, giving instructions connected with supplies, and giving specific instructions in connection with certain demolitions. That embraced, for example, the South Luzon Force in connection with extensive destruction of railroad bridges and other bridges on the line of withdrawal of their force north and the North Luzon Force with respect to specific major bridge structures in their area of withdrawal

- Q: How much more effective would the defense have been, especially those defensive actions conducted by the North Luzon Force in the Central Plains, had adequate supplies of antitank and antipersonnel mines been available?
- A: They would have been very, very helpful. In that connection, it was the responsibility of the Ordnance Department to provide antitank mines. They had virtually none. Knowing that they were important, I personally designed a so-called antitank mine. We were able, through a small factory in Manila, to build a vast number of small wooden boxes. We were also able to procure small electric storage batteries and contacts. So I designed what we called a 'Casey Coffin," a small box in which we had sticks of dynamite and electric caps. We put the contacts on the under side of the cover of this box with the dynamite, electrolyte batteries, and caps inside. We had the contacts so designed that a man could step on the cover without activating the caps. If two men stepped on it, or a tank, the cover would give way and it would detonate. So we made thousands of them and furnished them to the different commands. We set up these antitank mines on the principal approach routes and later in front of our defense lines on Bataan.

In connection with what we were saying about the antitank mines, the Ordnance was also supposed to provide grenades. There was a terrible shortage of grenades. So I figured we had to do something about that. So I designed what we called a "Casey Cookie." All it consisted of was a stick of bamboo, and inside of it we had dynamite, possibly nails, broken glass, and whatnot, and a detonating cap, sometimes percussion and some with time fuse, and a handle whereby you could swing it, similar to a hand grenade. They worked rather effectively, particularly during the defensive stages on Bataan.

- Q: When the Japanese landed at Lingayen Gulf on 22 December, any hope that MacArthur had of holding disappeared and he ordered the withdrawal to Bataan, as envisioned by war plan Orange 3. The engineers in the North Luzon Force then became critical to allowing the South Luzon Force time to pull back across the Pampanga River.
- A: Yes. Incident to that, I had Captain or Major (later Colonel) Manzano of the Philippine Scouts, who knew the Philippines very well. I sent him forward in connection with the preparation of successive defense positions on the withdrawal of the North Luzon Force. I had him recruit large numbers of Filipino civilians and lay out the successive defensive positions. That didn't mean digging extensive trenches and whatnot. We did endeavor, however, to prepare certain places for potential machine gun locations, other areas where they could get a good field of fire in front of these successive defensive lines.

As to our Philippine engineer units, we didn't have the Philippine Scout division up there, just the Philippine Army. So the Philippine engineer units were the ones that were primarily charged with demolition of bridges as their divisions withdrew from each successive defensive position, blowing up bridges and doing everything they could to delay the enemy. We also had issued instructions to the military district commanders and the Bureau of Public Works prior to that not only to evacuate all critical materials-explosives and whatnot—but also to destroy fuel and any other facilities that were of use to the enemy.

- Q: What were the days of December 1941 like? What were your general impressions of that time?
- A: Well, I knew the engineer mission was most important. I think we were the most effective force in connection with the delay of the advance of the enemy. I was continuously busy on the phone, with wires and conferences, getting instructions out to demolition units, groups, and preparing the major demolition units. In the meantime, we were recruiting additional personnel where we could. We were commissioning and trying to arm these newly commissioned civilians. It was impossible to go through normal administrative procedures in connection with getting their commissions. We threw the book aside and did what we felt was vital.

- Q: What was MacArthur's general attitude during December? Was he hopeful that reinforcements would arrive, or did he pretty well know that the situation was going to be pretty much fought out with what he had?
- A: Well, he was hopeful. We all were. However, I think realistically, we sort of felt that with the loss of the Navy at Pearl Harbor it was going to be difficult if not impossible to bring in any major reinforcements. We only felt we could merely hold, hold, hold—and that the longer time we could hold, the more chance there was of possible reinforcements.
- Q: Colonel Wendell Fertig put a great deal of effort into building airfields on Bataan in anticipation of reinforcements from the United States. Was that a realistic assessment or was it sort of a morale builder type of operation?
- A: I think it was a combination of both. We did feel, for instance, that even though reinforcement ground units—combat units—might have difficulty getting into the Philippines, we did feel that it was possible for air units to come up by way of Mindanao and then from there on up to Bataan. We felt that our Air Force complement could certainly be reinforced, even if they couldn't get the ground units in. And in anticipation of that, we had a very active program of building these additional airdromes. I might say we had to do it with large numbers of manpower and hand tools, because not only was equipment in short supply but fuel also was limited, and we often measured any construction job by how many gallons or barrels of fuel were going to be required from our limited stocks.
- Q: What was the attitude or response of the Philippine government to the situation?
- A: By and large, they were very cooperative. As I say, I had a good relationship with Mr. Paez and his Manila Railroad Company. We commandeered the railroad and its facilities. I sent an engineer officer over to his headquarters as my representative, who had practically full authority under my directives as to what we were going to do to destroy railroad bridges, destroy rail equipment, that we could not get back into our own area. As I say, we had full cooperation. Also, I had full cooperation from the Bureau of Public Works, having known the personnel previously.

- Q: The demolition of the Calumpit Bridge was essential to the entire campaign. How closely did you monitor that demolition?
- A: I kept in touch with it right to the end. I was in headquarters at Manila. In fact, I was the last one to leave. On the night of December 31st to January 1st, I was on the phone almost continuously with demolition parties as they contacted me. I was also in close touch with Colonel Skerry and telling him that we just had to hold that Calumpit Bridge first of all as long as possible and at least until 6 A.M. the next day in time to permit the passage of some of our demolition units that I still had down south of there.

The South Luzon Force had already cleared through Manila to join with the North Luzon Force. There was nothing in Manila in the way of combat forces between the advancing Japanese and our headquarters there. The rest of the staff had already left that afternoon for Corregidor, leaving me alone. Among other demolition parties, Lieutenant [Thomas] Delamore with his platoon of the 803d Engineer Aviation Company [Battalion] and his vitally important equipment came in to me that night, and I ordered him to rush on north with their equipment prior to the destruction of the bridges on his escape route.

I had also previously sent Colonel Manzano and his demolition units to destroy the bridges between Calumpit and Manila. I kept in close touch with him on that mission. I said we wanted to be sure we cleared all elements of the South Luzon and later Delamore's force before he blew those bridges.

Then finally, when Wainwright felt that after the junction thereof the South Luzon Force and when the advance of the north Japanese force was so close, they finally decided they had to blow this strategically important Calumpit Bridge. That was about 4 A.M. that Sunday. That was a very vital bridge over the wide Pampanga River. We had it very carefully prepared by our demolition group. It was successfully blown up and in fact had not been repaired even several years later, after we got back to the Philippines.

- Q: What was your estimate of the time you could hold off the Japanese in the defensive positions that you had been able to prepare?
- A: All we could do was hope we could hold them off as long as possible. I don't think there was any real estimated definite time schedule. It was just

a matter of dealing with and holding them off as long as possible, generally with poorly trained, under-equipped troops against a well-equipped and experienced enemy force.

In the interim, we prepared a forward defense position on Bataan, and I think that under the pressure of time and limited resources, we had it very well done. We gathered up all the barbed wire that was possible. We had taken every bit of barbed wire that was in Manila and moved it over to Bataan. We also salvaged barb wire from fences on Bataan and so on.

We had also, really by a super-human effort, gotten one of the very heavy 8-inch guns recently sent over from the States for installation on Corregidor. We moved that over poor and heavily congested roads and under extremely difficult conditions and emplaced it behind the forward defense position, so that it could cover the Olongapo sea approaches as well as the main highway crossing Bataan in front of this defensive position.

That would control the lateral movement of the Japanese after they advanced to Bataan. I just hated to abandon it later when we got the order to withdraw from our forward defense position to the so-called reserve position. I opposed that most strongly; in fact, to such an extent that when we received orders that we'd have three days, I think, in which to withdraw from the forward position to the defense position, I even prepared an "estimate of the situation" indicating the factors why we should try to hold this forward position. In sending it to General MacArthur and the chief of staff, I said, 'any decision having been made should not be questioned; but I question the estimate of the situation upon which this decision was based." I actually don't think there was then a really adequate estimate of the situation.

General Sutherland had shortly before made one of his very infrequent trips over to Bataan and had conferred with the force commanders. I think based possibly on trouble that General Wainwright had had with the Philippine Division on the left flank-they had been broken through—I think he decided that we should withdraw to the reserve position embracing a smaller overall area.

But in that time we could not displace, for instance, this heavy gun and its fixed emplacement. We'd lose all of the barbed wire, the defensive installations, the excellent field of vision that we had over the front, the

wonderfully fine artillery cover of the approach roads. In any case, no attention was paid to my recommended revised "estimate of the situation," and we withdrew to the reserve position. There was a terrible deficiency of knowledge among the Philippine units, and even among other units, where I think they failed to understand the principles of defensive installations, such as cross-fire protection for the fronts of adjacent units, the location of units, the siting of machine guns, and other related matters.

One thing that I strongly criticized, both on our forward position and on the reserve position, was the tendency for the commanders to place all of their troops in line, in position, on these forward defensive lines. I put in several memoranda and recommendations that they reduce their strength on forward lines and provide for stronger reserves, pointing out that any enemy force by concentration can penetrate almost any portion of a defensive line and outflank and cut off the adjacent lines, so it was essential to have reserve forces to meet them wherever there was a breakthrough (Appendix F.)

The Philippine Division was largely used as such a central reserve force. I did recommend that both the North Luzon Force, which had the left flank, and the South Luzon Force, which had the right flank, supplement their defensive displacements with reserves that they lacked.

Q: So you think that Sutherland's decision to withdraw was certainly hasty?

A: That was my personal reaction.

Q: That decision to withdraw was made by MacArthur, though?

A: Yes.

Q: But you think in this case it was based on inadequate information?

A: Yes. You see, I was on Bataan all the time. I'd make trips over to Corregidor at night. We would review the situation there. I also was covering the front at all times-I and my staff assistants. I had Major William Gay. He would daily cover one portion of the line. I had Lieutenant [Thomas] Delamore to cover another section. I had Major

Manzano and Major [Alfred] Kircher, all very able and dedicated officers, also on my staff on Bataan.

From my office I made or had almost daily field inspections of both the fronts and the flanks. I was continuously putting in recommendations and suggested changes in the defense setup. I might say that later on—this was after I heard that I with General MacArthur and selected members of his staff were going to be ordered to Australia—I decided to cover, together with Major Gay, on foot, the entire front starting on the east coast over to the west. (See Appendix G.)

During that three-day trip I went into all the forward outpost positions, the machine gun positions, the front and support lines, and directed many changes here and there. Upon my return I put in a long report pointing out a number of deficiencies that existed. It was obvious that many unit commanders had not inspected their respective positions or, if so, lacked the knowledge for their improvement. Later on I know that General Wainwright, when he took over command, disseminated these comments and directed appropriate changes to the forces there. In fact, that report is published in full as an annex in one of our volumes on engineer operations in the Southwest Pacific.

- Q: Do you think that possibly MacArthur's staff was not as connected to the situation on the front as it should have been had it been on Bataan?
- A: I felt that MacArthur's staff on Corregidor should have had more contact with the situation on Bataan. I have always stressed *personal* reconnaissance and the importance of commanders personally checking on the situation within their respective jurisdictions. I might add that General MacArthur had not been out to see any of the units during the withdrawal phase on Luzon. He also had not come over to Bataan.

I remember finally writing a handwritten message to him stressing and urging that he make a personal appearance over in Bataan to see the troops and to be seen by the troops. I indicated that if and when hostilities were over and it was found that he had never been there—I didn't use these exact words, but that was the intent—that it would be unfortunate. I said, "However, recognizing that you may feel that you should be at central headquarters continuously and it therefore is not possible to come, I

recommend that you issue a statement to the command such as the following. "Then I forcibly outlined that we must hold—pointing out the need of holding on. I said, "Reinforcements are on the way." We didn't know that they actually were, but it was necessary to get that thought across to our units. I indicated that the whole world was looking to us, and so on, stressing the urgent need to hold on.

The very next day General MacArthur came over for his first and only inspection of the Bataan front. Not only did he come over, but he also issued a statement somewhat in line with what I had indicated. In fact, later on he was criticized for issuing the statement to the troops that "reinforcements were on the way," as I had used in my draft. It was more with the objective of stimulating morale.

- Q: After the Japanese air forces had destroyed the American air forces, or largely destroyed them, do you think they really used their aerial dominance as well as they could have to prevent the movement of the American forces in the Philippines?
- A: I think relatively so. After our withdrawal from Manila they possibly could have inflicted greater damage on our forces by concentrating, you might say, on the destruction of our personnel rather than other facilities. But I know that we were surprised at their accuracy and their ability. They'd come over in formation, let's say at 20,000 feet elevation. We'd see our anti-aircraft shooting at them. But maybe we could only get to 17,000 feet, or several thousand feet below them. So they came over in perfect formation and would hit their target rather precisely and do it, I thought, extremely well on the airfields. They specialized in destruction of the airfields as well as Corregidor, our Navy base, and other installations.

In Manila we had the Pandacan oil installation, a major concentration of the four principal oil companies. We had a massive concentration of oil storage tanks there. They came in and bombed Manila but did not drop one bomb on or near that installation. They had hoped that when they took Manila they could take possession of all this critically needed oil, still in storage, and therefore they did not want to destroy it.

Well, I fooled them on that. During the week from Christmas to New Year's we concentrated on the movement of all available oil supplies from

Manila to Bataan. This was also during a critical period, because MacArthur's headquarters had pulled out on Christmas Eve, and he had declared Manila an open city. I had been up on one of the North Luzon defensive lines, and when I came back that evening I found that General MacArthur and his headquarters had suddenly moved over to Corregidor.

For the next week Manila was an open city. We had no defenses, no anti-aircraft or anything else combatwise in Manila during that critical period. It was vitally important to move all possible equipment, supplies, and petroleum to Bataan. We commandeered barges, water transportation, and trucks in addition to the railroad for such movement.

The Transportation Department was giving priority to "bows and arrows and groceries" —in other words, ammunition and food and so on. So the engineers had to scrape up our own transportation. And our supply man, [Roscoe] Bonham, did an outstanding job in getting our engineer supplies and equipment over there. We also tried to get as much fuel and lubricants also on barges, trucks, and rail. But anticipating our final withdrawal, I had prepared the Pandacan oil installation for destruction. I commissioned a Mr. Ramey, who was with Socony-Vacuum, made him a lieutenant and gave him a large demolition detail. We then prepared demolition charges on all the tanks and installations there at Pandacan.

At 6:00 P.M. New Year's Eve, after all of our forces had pulled out as well, after our and other headquarters had all pulled out, I had Ramey and our demolition group blow up that installation and destroy all the tanks and their remaining storage. We also fired automatic weapons into the lubricants that we had not been able to evacuate. We destroyed it all and prevented it from getting into Japanese hands. The Japanese had been very particular in their bombing that they would avoid that while hitting other targets in the area. They had, prior to the outbreak of war, been embargoed from their oil supplies, so that oil was to them most vital.

- Q: Going back to the Japanese again, what were your estimates of the Japanese military capabilities from the fighting that had taken place up to the time you withdrew to Bataan?
- A: It probably wasn't a fair indication of what it was. You have to keep in mind that our Philippine troops were comparative y untrained. They were

ill-equipped, with no artillery, transportation, short of automatic weapons and whatnot. It was almost a situation where when the Japanese appeared and approached and these troops were under heavy fire, the first thing they thought of, instead of holding on, was to withdraw to another rear position. The principal deterrent to the Japanese advance would be our engineer units blowing up the bridges and their approaches. But as indicated later in our operations in New Guinea, the Japanese proved themselves as an excellent fighting force. They thought that capture was the worst disgrace that could occur; death was preferable. Sometimes, even though their situation was impossible, they would still hold on, creaiting heavy casualties compared to the losses incurred by their final group that was left. They resisted to the bitter end. They were an excellent fighting force. There was no comparison between them and the untrained Filipino. One strong force that we had was the division made up of the Philippine Scouts. They performed well.

- **Q:** Did the Japanese deftness in jungle fighting surprise you?
- A: We knew that they were excellent at it. We sort of felt that with their experience in China and having been a fighting machine, having been well trained and equipped, we expected that they would be.

They were also ready to exist on short rations. They weren't accustomed, the way the American soldier is, to special food and all the perquisites we give our troops. Our troops basically, in peacetime, are, or at least were, not prepared for circumstances under which they fight and live under jungle conditions.

- Q: How much longer do you think the forces could have held out on Bataan had they not withdrawn from that front line to the reserve position, as you mentioned before?
- A: Well, no one knows. I just felt the forward position was much better. You always have the ultimate opportunity to withdraw to a reserve position. But I think our forces would have been more effective and our defense potential greater in that forward position than it was in the so-called reserve position. We had excellent observation for artillery coverage, control over the lateral Olongapo Road, relatively improved defense positions with barbed wire

protection, as well as a fine lateral road to the rear for movement between the separate North and South Luzon forces.

- Q: How much did MacArthur's initial decision to hold away from Bataan cause a dispersion of engineer supplies and a lack of proper preparation of defenses in Bataan?
- **A:** How do you mean, hold farther away?
- Q: Rather than retreat immediately to the Bataan peninsula like the war plan originally envisioned, but to send his forces out, like the North Luzon/South Luzon forces.
- A: Well, I think that was a reasonable and proper thing to do based on the time schedule that we had. I don 't think the Orange Plan or any other plan contemplated that as soon as war broke we'd immediately move over to Bataan with all of our forces without giving resistance, because to let an enemy force come down without resistance, they'd have no casualties, they'd have full equipment and ammunition and defense would probably be more difficult.
- **Q:** What do you think prompted MacArthur to sort of sequester himself in Corregidor?
- A: Well, that was his principal headquarters. He had excellent radio communication facilities. The staff was well protected; they were in the tunnels. I think it was the logical headquarters for the command. However, I think that representatives of the staff and so on that were involved should have made more inspections and contacts with the situation on Bataan, rather than being an independent sort of island apart.
- Q: How did MacArthur take the reverses of that fighting and the almost certain defeat of his forces? Did this have an adverse effect on him or was his morale relatively good throughout the fighting?

A: Well, I think his whole inner nature made him capable of withstanding that. I guess any commander would sort of resent it and be disappointed. But the answer was inevitable. I feel there was just no possibility at all of the Bataan-Corregidor force holding out forever.

Rations were short; we were on half-rations on Bataan. We had a light breakfast, a light supper, but no lunch. And our ammunition supplies and other supplies were dwindling. We had an outbreak of malaria. We had no quinine nor atabrine, and the troops were getting weakened with hunger and disease.

My headquarters was very busy with continuous inspection of defense installations and making suggested changes. We were also being subjected to air raids and some enemy action, although then relatively light up at the front. The only principal action, I think, was one where the Japanese made a landing on the coast behind our left front. There was a threat of cutting off the west coast road forward, and the reserve commander utilized any forces around that area, including our 803d Engineer Aviation Company. They were thrown into this combat to push out the Japanese who'd made that landing. They were not especially trained for combat and they incurred rather heavy losses, so much so that it almost destroyed the effectiveness of that unit. As a matter of fact, I did make a protest about their use for that purpose because there was a critical need for our engineers and their equipment. To use them, rather than some other infantry elements in the reserve force, to push out this enemy force that made the landing I think was sort of a waste of critical manpower. In fact, after that operation we moved the remainder of the company over to Corregidor to reinforce the engineer troops there while being rehabilitated.

One of the things, though, that we did was when the Japanese made the landing on the coast and took shelter in some caves in the coastal ridge. One measure that we used was to get a case of dynamite, lower it to where the cave was, explode it and hit them that way. I also got some small boats and got some sheet iron that had been used for water tanks, and used that as temporary armament on these boats so they could approach and fire on the enemy elements sheltered in the coastal ridge areas. They were relatively effective. Later on, however, a couple of them were bombed by Japanese aircraft.

- **Q:** Could you tell me anything about the exploits of your little engineer launch, the *Nighthawk?*
- A: No, I have nothing special, I think, to report about that.
- Q: I was wondering if there was something unusual. Apparently you did do a few things with that little launch.
- A: I believe that was one that I used to move from Manila over to Corregidor. As I said previously, I got out in the early morning of January lst. I was the last one to leave Manila. When I left, there was no one there other than one constabulary soldier. He took over our headquarters. MacArthur's own office was left intact. We had not cleared out anything, except we cleared out all the papers, files and so on, and destroyed those. But his headquarters office was left there intact. He sort of felt the Japanese commander would do with that headquarters what we would have done if we had come into their Japanese headquarters.
- Q: Could you give me some of your opinions of some people who were there with you? Richard Sutherland?
- A: Well, as I said previously, I indicated my difference of views in connection with his decision about withdrawing from the forward position to the reserve position. I felt that he, as well as others of the staff, could have and should have made more frequent personal reconnaissance inspections of the situation. But he was a decisive staff officer and a good transmittal officer of General MacArthur's instructions or requirements.
- Q: How about General Willoughby?
- A: Charles was our G-2 man. I think he was a well-trained, very capable intelligence officer. In the early phase of the war he had limited facilities to get intelligence information about the Japanese because that was mainly something that we'd have to get from outside intelligence sources, which might be in the War Department. Later on when we were in Australia and New Guinea, there we had better capability of getting intelligence on the enemy situation. There he did very ably.

Q: How about Colonel Stickney?

A: Colonel Stickney was a bit older. I think he was almost ready for retirement when the war broke. But as Philippine Department engineer, I think he was better qualified, say, for the peacetime functions of the department rather than the more active incidents and so on that would occur under combat conditions. But he and I got along very well. He cooperated excellently.

Q: Roscoe Bonham?

A: Bonham, Stickney's supply officer, did an outstanding job, particularly after the outbreak of war in connection with requisitioning of vital supplies. I gave him practically carte blanche authority to go out and requisition engineer equipment, supplies, explosives, whatnot that we needed. He did a very fine job on that. He remained in Manila the way I did after our department headquarters had moved to Corregidor on Christmas Eve. I was in constant communication with him on that mission, and he did an excellent job in commandeering barges, transportation, trucks, whatnot, and moving the maximum amount of engineer equipment, supplies, wire, explosives, small generating units, and so on over to Bataan, all under frequent enemy air raids on our defenseless open city.

Q: How about Wendell Fertig?

A: Fertig was a very able engineer and a good field engineer, too, in handling field operations. Indicative of what I thought of him was, later on after we were ordered to move to Australia to this new command, when I got down to Mindanao, we were detained there for three days. We were supposed to get out that night, but they had problems with getting aircraft to take us from Mindanao to Australia.

During that period, while the rest of our group remained at Del Monte, Brigadier General [Harold] 'Hal" George, the Air Force commander, and I made several reconnaissances-the first day down to the southeast toward Davao, then held by the Japanese; to the northeast; the next day to the northwest. We picked out potential airdrome sites. We had ambitious Plans as to what we wanted to do to prepare for hoped-for reinforcements from the south.

Knowing that their construction was going to be a critical operation, I prepared a wire from MacArthur to Wainwright ordering Fertig to be transferred from Bataan down to Mindanao, to put him in charge of the projected air construction operations there because I thought he was the best one qualified. That was a measure of the confidence I had in him.

He did go down there, and later on he felt he was there working for me. When the general-was it [Brigadier General William F.] Sharp? -issued orders that his Mindanao command was to surrender, Fertig decided he was working for me and General Sharp's order didn't apply to him. So he went off to the hills with some of his force, and recruited many Filipinos, and set up the Fertig guerrilla force. He was very effective as such in Mindanao throughout the rest of the war.

- O: How about William Chenoweth?
- A: Chenoweth, although a relatively junior officer, performed outstandingly as the corps engineer with the South Luzon Force. He met every emergency and crisis. He was most effective. We had a number of civilian personnel plus those whom I had commissioned for our demolition parties and whatnot. Our demolition phase was generally over when we moved to Bataan. So we gave Chenoweth a number of these men, and they organized a separate battalion made up of these civilian engineers and those I had commissioned. We supplemented them with a few engineer officers. They then gathered up a number of Philippine civilians, the laborers over there on Bataan, and he organized them into two battalions. They were very effective in aiding in the defense construction and other work there in his area. It was relatively well done and well handled.
- Q: How about Lieutenant General Jonathan M. Wainwright, who commanded North Luzon Force and then I Philippine Corps?
- A: I felt that General Wainwright could have done a little more than he did. He was a cavalry officer, an ex-cavalry officer, and I think he thought in terms of cavalry charges and whatnot. Insofar as his defensive position on Luzon was concerned, I thought it was not as well done as it was in the South Luzon Force, II Corps sector.

I had hoped that he would take a more personal interest in examining his position. I don't think he covered it adequately. I know when I covered it I found that a lot of the commanders of all ranks, who should have been up to reconnoiter and observe their defense arrangement, should have been there and made corrections which had not been done. As to later on, when he succeeded MacArthur, I am not familiar enough to comment as to his conduct on that situation.

- Q: What do you remember about Major General George M. Parker, who commanded South Luzon Force and then II Philippine Corps?
- A: I didn't have too much to do with him. I thought that he commanded his force quite well, both on the withdrawal and also on the situation on Bataan.

As I said, I felt that General Wainwright could have been more personally involved during the withdrawal phase of the North Luzon Force and later on the defense situation there on Bataan. But General Parker seemed to have the situation well in hand.

- Q: How about Major General Edward P. King, Jr., commander of the North Luzon Force after Wainwnght?
- A: I thought General King was excellent. He was the artillery commander. In fact, I think most of the casualties inflicted on the Japanese during the early stages of our defense situation on Bataan were inflicted by the artillery. I think they were the factor that withheld the Japanese forces most effectively.

It just seemed tragic to me, though, that when they withdrew to the reserve position, it reduced the capability of the artillery against the Japanese to a greater degree than the artillery could perform under our forward position in controlling the approaches to our defenses.

- Q: How about Brigadier General Harold George, air forces commander after Brereton?
- A: George was outstanding. He and I had a very close relationship. He was initially in command of the pursuit air force—very conscientious, very

active. At one time when we were on Bataan he conferred with me and Commander John D. Bulkeley on a proposal to ship the Air Force pilots to China. We had no planes and we thought it would be feasible and desirable to send these pilots by PT boats over to China so they could join our American Air Force over there. But that proposal was squelched. But George and I worked very effectively on Bataan in connection with our joint Air Force situation and also during the early stages down in Australia and New Guinea until he unfortunately was killed in an air accident at Darwin. In fact, the time that he was killed he and I were supposed to go on that same trip together. But things came up and I had postponed it or changed it for a mission that I had to take in New Guinea.

- Q: He was a very excellent air officer?
- A: Excellent, excellent.
- Q: He is one of the air officers about which very little is known. Unfortunately, he doesn't receive the credit he should have.
- A: Unfortunately, he didn't have too much time during the war because of his unfortunate earl y death. But I think we would have heard much more of him in the event he had continued to live and operate.

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- Q: When and how did MacArthur tell you that he was ordered out of the Philippine Islands and that you were going to go with him?
- A: I was advised by General Sutherland in one of my frequent trips over to Corregidor. As I say, I was on Bataan all the time. I'd make a trip over to Corregidor at night, check up on the engineer situation over there—utilities and reconstruction of the bombed, damaged utilities, and so on—and also on our small airfield that we had up at Corregidor, engineer problems such as that. It was then that I was told by General Sutherland that I was to accompany the group.