Allen Richardson: This interview is being conducted with Captain D.K. Hanna by Gunnery Sergeant Allen B. Richardson at Marine Corps Schools, Quantico, Virginia. The subject of the interview is fixed-wing aircraft operations in the Vietnam area and it is unclassified. Captain, would you state your name, grade, and service number please?


AR: What were your duty assignments while you were in Vietnam?

DH: I was an intelligence officer and an additional duty of an F4-B Phantom pilot.

AR: What period did you serve in these billets and where were you physically located within Vietnam during the period covered?

DH: I served for a total of two years in these billets, but during the period covered by the interview, I was in Vietnam from 10 April to the 6th of June 1965.

AR: Would you discuss any major combat actions, battalion size or larger, in which you participated giving the dates, location, and purpose of the operation?

DH: Yes, I’d like to cover a couple of items that really wouldn’t be battalion or larger size, but were at a significant from a point of view of Marine aviation as I go down through and I have a small list here. The first one would be the first excursion into North Vietnam by Marine fixed-wing aviation which occurred on the 6th of May, 1965. This was a rescue combat air patrol to the vicinity of Vinh Linh Army Barracks to the central
of northeast in North Vietnam and was with the purpose of providing RESCAP for an
RF-101 pilot who had been shot down. This flight was conducted by a pair of F4-Bs and
succeeded in destroying a 37-millimeter triple-A sight and a portion of a flack tower.
This was the one and only excursion by VMFA-531 into North Vietnam. Then on 14th of
May, a rather significant action occurred in which involved US Marine ground personnel
and this was a scramble to provide close air support for two trapped US Marine combat
patrols from Delta Company, 3rd Recon Battalion, 3rd Marine Division. This was in the
vicinity of Nam Nguyen, about twelve miles Northeast of Da Nang. Two combat patrols
had been attempting to flush out the Viet Cong and had gone into a valley which was
later discovered to be completely encircled by hard core VC and dug in positions.
Without the use of a Forward Air Controller or any means of communicating with the
troops in these two patrols, using an Army helicopter to radio-relay instructions, a flight
of three F4-Bs provided close air support for the two patrols and successfully were able
to get them evacuated out of the area. The initial request for these fixed-wing support
aircraft came due to the fact that the rescue helicopter going into pick up the wounded
and KIAs of this patrol had been rather badly shot up and had to withdraw without
accomplishing his mission. This was the first significant case of close air support for US
Marines on the ground in the Da Nang area and took place on the 14th of May 1965.
Then on the 27th of May, we had the first occasion for Marine fixed-wing aircraft to
provide helicopter escort and landing zone preparation for the largest force ever
assembled in one point in I Corps for the purpose of conducting assault and a search and
clear operation in the Da Nang area. This was a 3rd Battalion of ARVN Marines with a
battalion of ARVN troops comprised of two Marine helicopter squadrons HMM-163 and
HMM-161, in addition to portions of an ARVN helicopter squadron and Marine fixed-
wing air in the person of F4-B Phantoms. Now, this was conducted about seven miles to
the southwest of the Da Nang airbase and resulted in complete neutralization of the
landing zone areas with eleven structures destroyed, six damaged, two secondary
explosions, and was the first attempt by a Marine fixed-wing aircraft, jet aircraft, in
combat to lay down a last minute barrage of the landing zones using rockets just prior to
the helicopter touchdown. As attested to by the commanding officer of HMM-163,
Colonel Ewers, proved most effective. From this date on, the 27th of May, HMM-163
received no further ground fire or damage to aircraft or aircrew from VC activity due to
the close support they’re receiving from fixed-wing jet aircraft. On the 28th of May, the
day following, there was another helicopter escort landing zone preparation flight, this
time conducted some 180 miles southeast of Da Nang in the vicinity of the Gia Vuc
outpost. This was a one battalion ARVN troop and Special Forces lift into extremely
mountainous terrain to attempt to pin down several companies of main corps VC. This
helicopter lift was preceded by a one-and-a-half hour pre-strike and an interdiction of
targets in the area by Marine F4-Bs. Again, a last-minute rocket barrage delivered in
simultaneous landing zones, three simultaneous and adjacent landing zones, prior to the
first helicopter touching down. The timing that was being tried for on these barrages was
ten seconds prior to the first helicopter touching down on the LZ. There was to be a
barrage delivered, four nineteen-shot rocket pods by an F4-B coming right over the head
of the lead helicopter into the terrain surrounding the landing zones providing a
neutralization fire. The next major significant action I’d like to talk about is the Battle
for Quang Ngai and Quang Ngai province. This occurred on the 28th of May through the
6th of June, 1965, and this is a major battle in I Corps area which is credited which the
commanding general ARVN I Corps credits fixed-wing aircraft, both Marine and Air
Force, with the saving of Quang Ngai city and Quang Ngai province. And in fact, by
positive body count, there were over 600 KBA VC credited to air power alone and this
was a battle involving some 6,500 North Vietnamese regulars and main force Viet Cong
conducting heavy night operations, attempting to eliminate Quang Ngai city and the
major friendly elements of Quang Ngai province. This operation was the first
introduction of VMFA-531 into night strikes using para-flare illumination and this was
conducted with Air Force C-130 aircraft dropping para-flares in strings of fifteen or
sixteen flares at a time allowing un-interrupted light over the target for Marine Phantoms
to conduct close air support of ARVN troops and Special Forces personnel in
beleaguered outposts.

AR: How about helicopter operations in the area, Captain?
DH: Right, helicopter operations as I mentioned in the previous two cases,
VMFA-531 flying the F4-B Phantom was the first jet squadron to escort Marine
helicopters in combat and deliver landing zone preparation strikes in the Republic of
Vietnam, and this first incident occurred on the 28th of April, 1965. The tactics devised were basically a three-plane flight with a criteria of one aircraft in that flight, being able to attack any position around the helicopters within fifteen seconds of the helicopters being fired upon. In addition, the tremendous noise level created by the F4-B jets was planned to be utilized to keep Viet Cong heads down in the landing zone and for this purpose, the F4-Bs used a Luffberry-type pattern with one F4-B going by the lead helicopter and below him, right on the deck at high speed, 400 to 500 knots, pulling up in front of the lead helicopter in a tight G-turn and all three aircraft continuing this pattern around the lead helicopter, alternating each side of him. This covered a considerable amount of territory and was definitely credited by Huey Fang pilots with keeping the lead down as far as the VCs were concerned. The VMFA-531 flew a total of a 159 helo-escort and landing zone preparation sorties in all types of terrain and weather throughout I Corps and II Corps, South Vietnam. Some of the difficulties encountered in this helicopter escort, which has been practiced previously only by A-4 type aircraft and not in combat as of yet with the exception of this 531 incident, some of the difficulty encountered were keeping the helicopters in sight due to their green color and the green jungle terrain. This was somewhat alleviated by painting one of the rotor blades, the top of one of the rotor blades with a white paint which made it relatively easy to spot them in with the dark green background. In addition, it requires that the helicopters, especially in large formations when you’ve got sixty to eighty helicopters in one formation, requires that they maintain an extremely good and tight formation and warn the escorting aircraft when they intend to change directions, if it’s not a pre-planned change in the flight path. As you can imagine, attempting to provide escort when you’re doing 500 knots and the helicopters are doing about 80 knots and they all of a sudden change direction like they can very rapidly on you, it poses some problems for fixed-wing aviation.

AR: Would you discuss, from your particular point of view, the influence of weather on personnel, logistics, and so forth?

DH: Yes. Our particular squadron, as far as the weather and terrain was concerned affecting personnel, we were of the unanimous opinion that you required extremely good physical condition in all of Vietnam. The heat, you were capable of withstanding the heat, but the humidity when it got high was extremely bad and made the
situation entirely uncomfortable for you. In addition, we also of course found that the flight clothing presently provided to Marine aviators and the normal utility clothing and boots were definitely not suited to this type of climate or terrain. The utilities are too heavy. We eliminated this problem of course, by cutting off the sleeves on the utility jackets and this made it somewhat easier to get around. The new lightweight utilities should have a lot to do with making life more bearable as far as operating on the job is concerned. I’d like to cover this clothing and equipment a little bit more in detail later on when I get into the intelligence aspect of escape and evasion and survival as far as aviators are concerned. We generally discovered or found that moral was exceptionally high. I think this was attributed due to the combat mission required of Marine aviation. The max number of sorties required every day and you knew that the ground troops, squadron ground personnel, knew that each mission that they had assisted in getting airborne was going out to help somebody that needed help right then and there and our troops consistently provided out of the fifteen aircraft that we had available, our average availability for the period we were in Vietnam was thirteen out of the fifteen a day. Which when you consider the complexity of the F4-B fire control system, was an outstanding achievement.

AR: Did you encounter any unusual problems in the areas of personnel, intelligence operations, or logistics?

DH: Yes, in logistics. I think it’s generally accepted and well known fact of the aviation class 5A stores are in critical supply and I won’t delve into that in any further detail. One of the big problems we did encounter, however, was an F4-B squadron with the multiple carriage and MIRS and turret racks can expend a tremendous amount of ordnance daily. This requires a beefing-up of the squadron ordnance section in personnel to handle this capability and in addition, require some means of loading these bombs onto the racks as they sit on the aircraft. The method that we used was manpower and, of course, you can’t man handle too many 500-pound and 1000-pound bombs without incurring injuries on your personnel. In fact, our ordnance section had a high percentage, in relation to the number of men involved, of hernias and damaged hands from the 500-pounder and 1000-pound bombs being dropped and crushing hands and this sort of thing. A bomb-loader was borrowed from the US Air Force, an MJ-1 bomb-loader, and this is a
mechanical bomb loader that can lift either bombs or rocket pods hydraulically onto a
position on the MIR or turret and without this, we would’ve been in serious trouble as far
as changing ordnance loads on the max number of airplanes or getting ordnance uploaded
in a short amount of time. So, a bomb-loader of some type is a definite necessity. Now,
the Marine Corps does have a SATS field bomb loader, however, the problem with this is
it’s not good for rough terrain and you only wait one per SAT sight. So, if you’re
operating out of a fixed base, like Da Nang, you’re not authorized a SATS bomb loader
and you’ve got to do it by manual or hand method. One of the other areas, the most
critical areas I think the squadron encountered was the extreme shortage of maps,
particularly in the 1 to 50,000 scale and the 1 to 250,000 scale, AGC, air-ground charts. I
think it’s really not too well known in the United States yet, but aviators in Vietnam are
using the 1 to 250,000 AGC series chart, which is a new air-to-ground chart with a much
better terrain depiction on it for aviators in high speed aircraft to pick out individual items
of terrain. The ground troops of course, they’re using the 1 to 50 and the 1 to 250,000
AMS series, which is graduated in meters; the AGC series is graduated in feet. For the
Forward Air Controller or company commander, this presents some problems. If he
doesn’t think about it, then the aviator doesn’t think to query any elevation or altitude that
he gets from that could cause serious problems. But the map themselves were in critical
supply. Of course, all squadrons committed to contingency operations are required to
have a map mount-out readily packed and available to them, accessible to them. We
discovered that our mount-out packs of maps were being diverted, on their way from
storage in Japan, were being diverted to other units at Okinawa and consequently never
arrived to the aviation units in Da Nang in particular. Now, I speak specifically of MAG-
16 and VMFA-531. We found also that because of the shortage of maps, we had to reuse
many maps several times. The humidity, when you constantly fold and refold a map to
get a specific area on it in the small confines of a cockpit, the extreme humidity
encountered in Vietnam causes the map to start shredding at the seams or the folds that
you’ve got folded in the map and this creates some problems. We normally got about
five or six flights out of one particular map and then had to destroy the map. It became
unusable. Another area was vehicles. The aviation (unintelligible), a multipurpose
vehicle for aviation units, we found was completely unsatisfactory in Vietnam. It had a
high rate of deadline due to parts, transmissions breaking down with no spares available. The vehicle has a tendency and not even in rough terrain, but just slightly rough terrain, of coming apart at the seams right behind the driver’s cab of the truck. The whole frame and everything just cracks and breaks. Tremendous problem with parts and defective items on the (unintelligible) itself, particularly in the ignition and the wiring system. This vehicle could stand some real close scrutiny by the Marine Corps as far as improvements are concerned.

AR: Do you have any observations on the equipment and weapons provided to your unit, other than the trucks we just discussed?

DH: I’d like to if I can, just keeping my notes in line here, I’d like to go into the intelligence aspect right now and cover that a little bit as it relates to problem areas.

AR: Yes, Sir.

DH: One of the big things that we discovered or I had discovered since being in the intelligence field is that we have extremely limited personnel augmentation for squadrons, aviation squadrons that are going to operate independently of the air groups and a large percentage of our contingency plans call for independent squadron operations and there appears to be no planning done; although I realize that there is an extreme shortage of intelligence trained personnel. There doesn’t appear to be too much consideration given to independent squadron operations and augmenting them intelligence-wise to carry out their mission. There is, as I’ve mentioned previously, a decided lack of qualified Air Intelligence officers and I think an excessive rotation among intelligence billets. I think the Marine Corps in the near future is going to have to look towards some sub-specialization by aviation officers into this air intelligence field. It’s an extremely technical field. If the individual is going to perform satisfactorily in combat, it requires a vast amount of knowledge, which can’t be accumulated on short notice. This guy has got to be training for a long period of time, using the publications and documents that he’ll use in combat, be thoroughly familiar with them and be capable of conducting an adequate intelligence section. The Marine Corps going to have to look towards some sort of sub-specialization in the 0200 field as far as air intelligence officers are concerned. In Vietnam itself, we found that a distinct disadvantage in the fact that the marine VMCJ squadron was committed, of course, elsewhere and not able to provide
Marine fixed-wing aircraft with pre- or post-strike photography of target areas. In the type of terrain you have in Vietnam, photography is of the utmost importance even on local unit operations when you’re providing an air patrol or airborne alert aircraft for a patrol action that’s taking place. Photography is imperative. We also discovered that there’s an inadequate supply of hardcover intelligence publications for squadrons that will be operating independent of their parent air groups. The minimum intelligence requirements list that are published by the PAC and the LANT levels, give an allowance list of various publications for various units. Normally, a squadron operating with its air group wouldn’t go to the air group if they wanted some particular document which they were not authorized to hold. If the squadron then splits off from the parent air group and is expected to function a complete intelligence section, the group is not prepared with additional copies of these publications either in a mount-out pack of some kind or a ready-issue pack to be given to the mount-out squadron, is not prepared to turn their publications loose because of course, they have other squadrons to support. So, we found this was an extreme problem that we have to borrow from the Air Force in Japan, beg from the wing any extra available copies of publications that were required for squadron operations. Small, but minor, but very important problem was the allowance of safe storage allocated to an individual squadron. I can’t recall what the exact number of safes authorized a person BMFA squadron is, but there are not enough safes to go around, particularly when you move out of a nice brick building with all the security features available into operating in the field with tents or on a hangar where you’re conducting intelligence operations with other aircraft maintenance briefings, troop lounges, and this sort of thing. You’ve got to have an increased allowance of safes and these should be accounted for and either held as your maps and your intelligence publications are in a ready mount-out status to be given to you when you mount-out or deploy, or given to you on a permanent custody basis. This again, this shortage of personnel, a lot of people don’t appreciate that in the intelligence business, you have to operate an intelligence section twenty-four hours a day, seven days a week when you’re in combat. There’s no time off to go get chow, no time off to get sleep. Somebody, a qualified individual has got to be manning that intelligence section twenty-four hours a day. Here we again, come up to this problem of a lack of qualified intelligence personnel. I also believe that combat
operations by air units in Vietnam pointed up the requirement or the possible requirement
to consider or reconsider separating the intelligence section from the operations
department in the tactical squadrons. As it’s presently done, subordinated to the
operations department, intelligence matters which are vital and have been subordinated in
peace-time training, now assume an urgent status and come to the fore in combat and
never before have the intelligence personnel been given the responsibility and the
authority to conduct, particularly training and peace-time endeavors where everybody is
clamoring for slice of the training cake. If he’s subordinated to the operations department,
he gets whatever the operations department wants him to have and not what he feels is
necessary for the unit as far as intelligence training is concerned. So, I think this should
be reconsidered. I think also, we have an extreme problem with the low experience level
of all intelligence personnel caused by this lack of interest in the training program during
peacetime. Intelligence never seems to become too important until you’re getting shot at
and then it’s too late to start acquiring intelligence knowledge from the individual
operating level. So, I think this requirement to have an individual S2 department to get in
to the squadron with a captain or senior first lieutenant as the S2 officer, who can fight
for training time and insure that training is conducted within a unit, is imperative.

AR: Captain, what type of aircraft did you fly?
DH: I was flying the F4-B Phantom, twin-jet, twin-seat aircraft.
AR: What did you think of its combat capabilities?
DH: I thought its combat capabilities were outstanding. The only deficiency that
we noted with the aircraft was the lack of a gun pod and I think it’s generally accepted by
aviation units in Vietnam that the 20-millimeter cannon is the most useful all around
weapon you can have on an aircraft. Other than that, the aircraft with its dual capability
of carrying its air-to-air intercept ordnance load plus a conventional ordnance load gives
it an outstanding versatility in Vietnam.

AR: How many missions did you fly, Captain?
DH: I flew a total of eighty-seven missions.
AR: Would you give a brief description of a normal mission?
DH: Yes. Let’s take, for example, a ground alert mission, which we stood many.
You would be on a fifteen minute alert status, a scramble would come in for some US
Marine or Special Forces or ARVN unit that was in trouble and required close air support immediately. As you raced out to the aircraft and cranked up normally in sections of two, the intelligence section would crank in and start producing the maps; one for the pilot and one for the RIO of each aircraft. By the time you got started out on a flight line and were accepting your mission over the radio from the tower, the intelligence section would have the maps done up and at your aircraft. As soon as you got those aboard, you took off out the taxiway and got armed from the ordnance crews and then got airborne on a fastest possible type run to the target area. We normally utilized a Forward Air Controller Airborne either Air Force or Marine and positioned ourselves some ten miles from his position after checking in with him in the air on the way to the target to preclude the VC from finding out right away that we were on our way to the target. As soon as the Forward Air Controller Airborne was ready to receive us, we would acknowledge, tell him that we were headed in from the initial point and to go head and mark the target as soon as we had him visually. He would mark the target with a smoke rocket, stand off the target a couple hundred meters to one side of it, and as soon as that smoke rocket went off, the first aircraft was expected to be in his dive on the target and the forward air controller would then correct his hits from that smoke rocket. Each succeeding pilot would be in the dive as the pilot, the head of his ordinance; went off on the target and would be corrected in distance and clock code by the forward air controller airborne. Because of the limited or non-existence of enemy anti-aircraft fire in South Vietnam was the millimeter capacity, the flying was done on extremely precision basis; everybody flying as accurate a path as they could without much thought to evasion because of the lack of triple A.

AR: How about ground fire; small—?

DH: Yes, we had a fairly good amount of ground fire, mostly .50-caliber automatic machine guns and small arms and automatic weapons, all of it using tracer. Of course, the .50-caliber was only effective against an aerial target up to about 4,500 feet. The small arms and automatic weapons up to about 1,500 feet, so they didn’t pose too much of a problem to us. In fact, if the gunner was using tracer, it provided a tremendous pinpoint to us of his position and we just followed his tracers right on down and zapped him.
AR: As far as your missions in Vietnam in particular are concerned, is there anything peculiar to the Vietnam area and aircraft operations in combat?

DH: Well, I think primarily the fact that there is an intense or a large amount of jungle in Vietnam, of course, and the pilot does not always able to see what damage he is doing. In fact, we don’t get reports back to us sometimes from a ground agent that’s sent into the area or a ground unit that’s involved in combat. We don’t get reports back in the squadron for maybe six weeks or two months, indicating what the damage was on any particular hop. A lot of times, it’s just a great big sea of green jungle and you’re dropping bombs in it and you have the frustrating feeling that you’re making toothpicks and matchsticks, but you know that underneath that jungle, there are troops of VC and the Vietnamese regulars, North Vietnamese regulars and that occasionally, we’ve had reports back of 160–180 K NVAs by air on one of the particular strikes in that type terrain.

Once you get over this frustration and not being able to see the big buildings blowing up and the troops dying in the open fields, it’s definitely a self-satisfying feeling to know that you’re doing an awful lot of good for the troops down there who have no other means of support other than air power; they can’t get artillery into them.

AR: So, you’d say the coordination between ground and air, then, is excellent.

DH: Tremendously so. I think the Marine Corps does have one problem in the patrol actions they run that there are not enough Forward Air Controllers to go around for each patrol. If I were an infantry commander, I would ensure that the officer taking that patrol out knew how to communicate on an air-ground radio and had an air-ground radio with every patrol they went on, that there are alert aircraft available to all units in Vietnam and if you get in a jam and you have no other supporting fire and you have a UHF capability or a radio capability talk to air, get them in there and they’ll work with you. If the aircraft cannot talk to you, they cannot give you good support. They’ve got to know where you are and where you want the ordnance put.

AR: Are there any problems as far as staying on-station and having targets available are concerned?

DH: No, I understand right now, of course, that the targets are getting scarce and few and far between. But as far as on-station time in a conventional ordnance load, we figure than an hour-and-a half on-station within a 100 mile radius of Da Nang, we can
stay on-station any length of time. I think this was one of the big advantages of the Forward Air Controller Airborne. If you have run out of targets, the Forward Air Controller Airborne just decreases his altitude and gets right down on the terrain or the jungle or whatever the terrain is you’re working in and he’ll fly around low and slow until some VC just gets cocky enough that he’ll take a shot at him and the Forward Air Controller Airborne can hear that round coming up towards him and he can pinpoint where it was delivered from and right away he’s got a target for you. So, this was one of the good points of using a Forward Air Controller Airborne. They’re invaluable in terrain like in Vietnam.

AR: I understand, Captain, that you had some aviation firsts.

DH: Yes, yes we do. I think VMFA-531 scored several firsts for Marine aviation. The squadron was the first Marine squadron to use F4-Bs in combat. It was the first squadron to utilize F4-B jets in helicopter escort and landing zone preparation in combat. It was the first jet squadron in Vietnam to operate under night flares dropped by transport aircraft, and it was also the first jet squadron and Marine Corps squadron to use the air support radar team in combat. In fact, we utilized the air support radar team for the very first time in combat in Vietnam.

AR: Thank you very much, Captain, for you interview.