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HELICOPTER COG



Forward helicopter combat operations centers are enhancing air and ground efforts in Viet-Nam.

By **Col W. G. Johnson**

DURING the course of the Vietnamese counterinsurgency operation, helicopter groups repeatedly have been deployed into forward operating bases to support Marine and ARVN units. Extended operations against the insurgent Viet Cong and North Vietnamese forces made deployment to forward bases absolutely necessary.

Temperature and humidity are always a problem when figuring helicopter load factors. The rotor hours lost transiting to and from home base

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are critical. Rapid recycle time is required. Immediate response to requests for emergency missions is vital. All of these factors dictate the deployment of helicopters to a forward operating base.

The early experience gained in operations STARLIGHT and HARVEST MOON indicated that very positive command and control measures were required for extensive helicopter operations in support of sizable ground operations. In operations of this type, the communication problems are such that distantly located control centers are extremely hard put to maintain the detailed knowledge required to control hundreds of helicopters engaged in literally thousands of individual missions. Positive knowledge of helicopter availability, reserves, recycle time and time for assets to generate must be immediately available to the overall commander if he is to exploit successfully those sometimes fleeting instances of contact with guerrilla forces.

During the planning phases for operation DOUBLE EAGLE, plans were developed to establish and operate a forward operating base for MAG-36 in support of Task Force DELTA. In addition to the manifold tasks of establishing and operating a forward airfield from a bare ground basis, it was realized that extremely detailed knowledge of helicopter assets would be required. This was repeatedly emphasized during briefings by the Commanding General, Task Force DELTA. The establishment of response times and alert forces to meet various contingencies made this even more important. To meet these requirements and to be able to properly advise the Task Force Commander on the helicopter assets available and to forecast generation of helicopter assets with realistic time factors, a detailed and current visual presentation was necessary. To keep the presentation up to the minute, timely input of statistical information was required. This was the basic problem which resulted in the MAG-36 forward helicopter combat operations center.

To provide a usable end product, the decision was made to organize an operations and intelligence complex. This was centered around a comprehensive, easily read status board. The status board would provide for all of the normal information relative to aircraft schedules, assignments and missions. In addition, vital information as to status of fuel and oil, ordnance, hours flown, sorties flown, downed and recovered aircraft, helicopters available at rear areas, winds, weather, communication facilities and frequencies was needed.

First a test run. A rough status board with its many details was manufactured. Positions of operations duty officers and communication personnel were established. Plot plans of desired layouts were

recommended, rejected, reworked and approved. An operations center exercise was scheduled and run, centering in the S-3/S-2 sections of MAG-36. As a consequence, the status board was revised and made larger, with more detail. As an additional test, the combined briefing tent, S-3/S-2 sections of MAG-36 functioned for short periods in the manner contemplated for use during DOUBLE EAGLE. The Group 36 combat operations center was now ready to deploy to its forward base. It was ready to provide the Commanding General with correct information as required.

The final overall COC arrangement for DOUBLE EAGLE envisioned the use of one general purpose tent for the Operations Section, one general purpose tent for the Intelligence Section and one general purpose tent for Communications. These were located immediately adjacent to each other. It was possible to move easily from tent to tent without undue exposure or time lost. When actually deployed and in the field, these tents were centrally located on the reverse slope of the huge coastal dune that was "Johnson City" during operation DOUBLE EAGLE. All tents were dug into a depth of 6 feet, sand bagged, camouflaged and connected by communication trenches. Blackout conditions were provided and blackout lighting was planned and utilized.

The overall organization of the operations (combat operations center) properly called for positions for individual squadron duty officers, operations clerks, situation maps and briefing boards, the master scheduling board, the helicopter commander and his S-3 officer.

Communications required to operate the complex began with a group switchboard tied in with the switchboard of the ground commander. Hot lines were provided to the Direct Air Support Center (when deployed) and the Fire Support Coordination Center, as well as the airfield control tower. An additional hot line was provided to the group liaison officer located with the Logistics Support Unit. The group command Fox Mike was remoted into the combat operations center as well. In addition to the group command Fox Mike, the VMO command Fox Mike was provided to the VMO duty officer's position when required. Necessary command and administrative nets were utilized to Group rear. Communications to the Tactical Air Control Center were through the Wing Direct Air Support Center located in the forward operating base. The overall combination of communications provided adequate and highly effective communications.

The requirement for flexibility of command and control in a dispersed operation of this type is keyed on communications to the Tactical Air Control Center and on-the-spot decisions. As a consequence of the remoteness from the overall air command center, the Commanding General, 1st Marine Air Wing revised certain

procedures. A Tactical Air Commander was appointed for each operation commencing with DOUBLE EAGLE. As the deputy of the wing commander, he was usually the helicopter group commander and had the added responsibility for all the air requirements in the area of the specific operation. This system proved highly flexible and highly effective when used in conjunction with the COC and a deployed DASC. It also further emphasized the extreme importance of the connecting communication link with the Wing Control Center. Close cooperation with the air officer of the supported unit greatly enhanced effectiveness.

The personnel required to operate the basic combat operations center (S-3) included an operations NCO and 1 senior NCO assistant;

2 radio operators/duty clerks;
2 runners/status board keepers;
1 duty officer from each squadron;
1 senior watch officer, i.e., S-3, Assistant S-3, Group Exec, Group CO.

The S-2 section of the combat operations center required:

3 clerks;
1 radio operator;
1 Assistant S-4;
1 S-2.

This section was also bolstered by the addition of squadron personnel during periods of heavy action.

The proximity of the S-2 section to the S-3 enhanced the overall effectiveness of the center. Pilots were briefed and debriefed with great rapidity. A flak plot was kept up to an almost immediate readiness and information was passed to the operation briefer concerning peculiarities of the area of operation. The S-2 operated a Fox Mike radio both at Ky Ha and in the field, providing an additional channel for expediting information. A bonus was also available in the close collaboration of the S-2 of the MAG with the G-2 of the Task Force. Constant liaison resulted in the exchange of information of great value to both sides. The S-2 of the Group was enabled to pass directly to the G-2 of the Task Force immediate information in the form of Pilot Reports and received in return a wealth of information on the enemy situation which was not available to the pilots otherwise.

Just what did this combat operations center complex accomplish? It:

assigned missions to units; planned and briefed all major strikes; designated Tactical Air Controllers Airborne and strike leaders for major strikes, maintained constant records of every aircraft assigned and its mission; briefed alert and reaction forces; launched med evacs; reconstituted med evacs; kept a constant running

tally of aircraft available by type, number and squadrons; kept a constant knowledge of aircraft available in rear areas; determined length of time aircraft would be out for maintenance and estimated time of return to up condition; kept weather up to date; kept frequencies up to date; kept constant record of ordnance available of all types; kept a constant record of fuel and lubricants on hand; kept a continuing status of downed aircraft; directed downed helicopter recovery; maintained required helicopter support of the Logistics Support Unit and bolstered it when required (and assets available); kept records of sorties, missions, aircraft recovered, aircraft hit, etc.; kept ground commanders informed as to status of assets available to him; advised the DASC or TACC of forthcoming CAS requirements, including recommended ordnance loads when applicable; and maintained continuous liaison with the ground command post and knowledge of the ground situation.

In addition, the necessary coordination and planning for the fixed wing air support was conducted from the combat operations center. The extremely close collaboration of the air officer of the task force and the officer-in-charge of the DASC resulted in timely and effective helicopter and fixed wing support. This was accomplished despite marginal time factors and reflects great credit on not only the coordination and communication, but upon the "can do" spirit of the fixed wing air groups. MAG-12, in particular, which was most closely located to the majority of MAG-36 operations and which had the bulk of the attack aircraft, repeatedly produced minor miracles of revising ordnance load and arriving on target, when needed.

This concept was born of hard lessons of combat experience and received its major development during DOUBLE EAGLE. How did it work? Let's take a slice of a day's operations:

The senior watch officer sits in front of his status board. He can tell at a glance exactly how many aircraft he has on missions, on alert, on standby and available. He knows his aircraft and crew availability, not only in the forward operating base, but in the rear at his group's home base, and also any helicopters available to him from other sources.

He is called to the Task Force command center for briefing. An Assistant 3 goes with him. The G-3 or C/S or the CG, if appropriate, outlines a proposed operation. The senior watch officer advises that he can support it and a time frame is established. The CG desires that a small alert force be designated and helicopters set aside to move them on notice. The tentative landing zone is selected and the time to make the landing is designated.

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At this time, available information is passed from the command post of the CG to the helicopter combat operations center. A strike leader and a Tactical Air Controller Airborne are designated. The ground commander, the helicopter commander, the strike leader and the Tactical Air Controller Airborne will fly to and identify the landing zone and determine its suitability. The details have been passed by the air officer to the DASC and the supporting air requirements are made known to the wing TACC.

More details are determined and passed to the helicopter combat operations center as developed. Crews are assigned and maps are passed out. The Tactical Air Controller Airborne, the strike leader, the ground commander and the helicopter commander have returned. The basic helicopter plan is outlined by the strike leader. It is approved by the senior watch officer. Pilot and crew briefing starts immediately. The time slowly runs out and aircraft are manned. The troops are picked up and the strike is under way. The landing executed. The command radio hears a helicopter is down in the landing zone. All recovery units are alerted. The Search and Rescue bird with mechanics aboard has landed to check damage. The crew of the downed bird has been picked up. Marine infantry in the zone keep it secure. The report of the Search and Rescue indicates minor maintenance and gives a time schedule for repair. A replacement crew is designated at the combat operations center and placed on standby to recover the downed bird when it is certified flyable by the maintenance crew. The call comes for emergency medevac. The crewmen of the medevac aircraft are alerted and start the aircraft while the plane commander is briefed as to details. The medevac launches. The medevac must be and is reconstituted. Aircraft and crews are designated from the remaining assets. Again the call comes to launch medevac and again it must be reconstituted. The downed bird is reported ready to fly by the Search and Rescue crew but we have only the two helicopters left for medevac. The CG is advised of the situation and the alternatives. We must either leave the bird in the landing zone for a while longer or utilize aircraft from the alert force. The CG makes the decision that the downed bird will be picked up immediately and the medevac reconstituted from the alert force which will now be two aircraft short. The operation continues and we have a confirmed report of another downed helicopter. This time it is in an unsecure zone. The CG directs the launching of the alert force to provide security for the downed helicopter but we are short two birds. The senior watch officer pulls two birds from the logistics support unit to replace the shortage and the alert force launches for a landing to secure the

downed bird. The operation continues. Assets are juggled in accordance with the priorities established at the overall command level. Pilots and aircraft are shifted from mission to mission as required. The operation continues.

"DOUBLE EAGLE" was the crucible which tested and developed many of the combat techniques which have become relatively standard. The scene reported previously was repeated day after day throughout the operation. Over a month of combat operations were conducted from two forward airfields, with only a two-day lapse involved in shifting positions approximately 70 miles. Over 26,000 troops were helilifted to landing zones. Multiple battalion lifts were conducted over a 600 square mile area and over similar area in later operations. On the completion of this operation, the group returned to its home base at Ky Ha.

Throughout the period, close control was exercised over the helicopter assets. Careful utilization of assets and adequate provision for maintenance were included in the Ground Commander's overall plans for his operation. This attention to detail and knowledge of available assets permitted the group to fly thousands of combat hours in support of Task Force DELTA, to land as many as three battalions in a day and to resupply up to four battalions in the field solely by helicopter. Despite extensive battle damage received during the period, not one transport helicopter was lost or abandoned. At the end of DOUBLE EAGLE the air group's overall aircraft availability was very near that with which it had commenced the operation. As a consequence of the use of the helicopter combat operations center concept, in close collaboration with the overall Task Force Commander, Group 36 was able to meet every commitment placed on it by the command and maintain its capability to conduct further combat operations without stand down for maintenance or crew rest.

For example, only four days after return from DOUBLE EAGLE MAG-36 commenced OPERATION UTAH (GAZETTE Oct '66).

The concept for the operation of the helicopter combat operations center was repeatedly utilized in large and small operations. It did not remain static but it did retain its basic form.

OPERATION COLORADO, a joint operation with the Fifth Marines and 2nd ARVN Division Reinforced, commenced with the largest helicopter lifted landing ever conducted by the ARVN forces. Approximately 3,000 Vietnamese Marines were landed in the initial lift. The execution of this lift and the subsequent supply of both ARVN and Marine artillery batteries solely by helicopter, even during multiple battalion helilifts, clearly demonstrated the capabilities of and the ability of the combat operations center to support the heavy operational and logistics effort required. USMC

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