

HISTORY, ORGANIZATION AND ROLES OF THE NIGERIAN AIR FORCE

INTRODUCTION

1. The armed forces of a nation constitute an effective instrument of national power. The Nigerian Air Force (NAF) is one of the instruments by which Nigeria can apply its power. The NAF has the primary responsibility of defending the airspace of Nigeria and ensuring that other sister Services enjoy a favourable air situation in their respective areas of operation. The NAF meets these responsibilities by the application of air power. Air power is usually defined as 'the ability to project military force through the air medium'. The attributes of high speed, long-range, surprise, inherent flexibility and devastating firepower, distinguish air power from sea and land power. A working definition is that given by Lord Trenchard who said, 'air power is the ability to use the airspace for offensive, defensive and supply services and deny its use to an enemy'.

2. As members of the armed forces, you will appreciate the advantages and the effectiveness of air power if properly employed in combat. One cannot easily forget the decisive contribution of air power to the outcome of the Arab-Israeli wars and in the Gulf Wars. We know that air power was the determining factor in Kosovo and Afghanistan. We also know that the impact of air power was very significant in the overall conduct of ECOMOG operations. Col John Warden of the

United States Air Force captured the significance of air power when he said;

'No major offensive has succeeded against an opponent who controlled the air and no defence has sustained itself against an enemy who had air superiority. Conversely, no state has lost a war while it maintained air superiority; and attainment of air superiority has consistently been a prelude to military victory.'

All the same, air power application and exploitation must be linked with sea and land power in order to achieve a balanced national military power.

3. The size, structure and composition of an air force would depend on a careful analysis of the threat to national security. Such threat could be enduring or emerging, from either internal or external environments. Apart from political and economic considerations, the effectiveness of an air force would depend largely on the size of her skilled manpower, availability of technologically advanced platforms and equipment as well as the structure adopted.

4. The rapid advancement in technology has led to a growing integration in the management of the Nigerian Armed Forces. As air power plays an increasing role in surface battles, surface forces are beginning to realize the value of having component air power capability. Students would be aware that the Nigerian Navy now has ship borne attack helicopters

while the Nigerian Army has also trained some helicopter pilots. In view of this, the employment of national military power would require increased tri-service integration. Notwithstanding the convergence of their traditional areas of responsibility, each of the Services has different roles. In other words, land power, sea power and air power each have different operational and tactical applications and each require specific skills and expertise. It is therefore, important that all personnel improve their knowledge of the employment of air power in readiness for future joint operations. This paper is therefore written to familiarise senior course students with the history, organization and roles of the NAF, the jewel of the nation, the last to come but definitely not the least. The paper will cover historical background, NAF Structure and NAF roles and capabilities.

AIM

5. The aim of this paper is to acquaint you with the history, organization and roles of the NAF.

HISTORICAL BACKGROUND

6. Air power came into existence long before the First World War but assumed pre-eminence during the Second World War. It has since been undergoing phenomenal development, especially in advanced countries. However, the need to establish an air force for Nigeria did not arise until the early 1960s. After attaining independence, Nigeria vigorously involved herself in sub-regional and other international

commitments like the United Nations peacekeeping operations. As part of her desire to fulfil these commitments, the idea of setting up an air force was mooted. This idea was further favoured when seen against the background of difficulties faced in previous operations without our own air force. For instance, in campaigns such as those of Tanganyika (now Tanzania) in 1959 and of the Congo in the early 1960s, Nigerian troops had to be airlifted by foreign air forces to and from the theatres of operations.

7. Recruitment into the NAF began in 1962. However, it was not until 18 April 1964 that the Legislative Act on the establishment of the NAF was passed into law. This makes the date the official birthday of the NAF. The act states; 'there shall be established and maintained in and for the Federal Republic of Nigeria, an air force to be known as the NAF'. The Act also states that the NAF shall be charged with the defence of the Federal Republic of Nigeria by air.

8. Additionally, the Armed Forces Act, now cited under CAP A20 Laws of the Federal Republic of Nigeria 2004 added that the NAF shall, in particular, be further charged with:

- a. Enforcing and assisting in co-ordinating the enforcement of international laws, conventions, practices and customs ascribed or acceded to by Nigeria relating to aerial or space activities in the Nigerian air space.
- b. Co-ordinating and enforcing of National and International air laws acceded or ascribed to by Nigeria.

c. Delineating, demarcating and co-ordinating of all aerial surveys and security zones of the Nigerian air space.

d. Other duties as the National Assembly may, from time to time, prescribe or direct.

9. In operational terms, these provisions are translated into the following objectives:

a. To achieve a full complement to the military defence system of the Federal Republic of Nigeria both in the air, sea and on the ground.

b. To ensure fast and versatile mobility of the Nigerian Armed Forces.

c. To ensure the territorial integrity of a united Nigeria.

10. In order to set-up such a highly technical Service to meet these objectives, it was necessary to seek foreign assistance. Therefore, the German Air Force was given the difficult task of not only establishing, but also equipping and running the NAF with a view to eventually handing over to Nigerians. Consequently, some officer cadets and airmen were sent to Germany for flying and technical training.

11. The Germans started by opening a base in Kaduna in 1963. Unfortunately, their contract was prematurely

terminated in 1966 following the crisis and the subsequent Nigerian Civil War. Thus, the young inexperienced NAF had to contend with the near impossible task of fulfilling its assigned role of defending the Federal Republic of Nigeria by air. Ground attack and medium transport aircraft were hurriedly introduced into the Service. Additional to that of Kaduna, NAF units were established in Kano, Makurdi, Enugu, Calabar, Port Harcourt, Benin and Ikeja.

12. Despite a shaky start, the NAF played a very significant role in the successful execution of the Civil War. After the war, the NAF was then faced with the problem of re-organization. The force structure adopted was modelled after those of the Royal Air Force and the United States Air Force. The NAF has since then been undergoing periodic changes.

NAF STRUCTURE

13. The organizational structure of the NAF is based on a functional concept. HQ NAF is responsible for establishing long and short-term mission objectives and articulating policies, plans and procedures for the attainment of the policies. In addition, HQ NAF liaises with the NA and NN on joint operational policies and plans. Furthermore, in order to meet up with emerging challenges, the NAF establishment is reviewed every 5 years. However, the Service is yet to fully implement the 2006 - 2010 NAF Establishment; the currently organisation chart is at Enclosure 1. The Chief of the Air Staff (CAS) is vested with the command and control of the NAF through 5 specialist staff branches namely: Policy and Plans,

Operations, Logistics, Administration and Inspections Branches. Each branch is headed by a principal staff officer known as the Air Officer in charge or Air Officer for short. Hence, we have Air Officer Policy and Plans, Air Officer Operations, Air Officer Logistics, Air Officer Administration and Air Officer Inspections. These air officers who are assisted by directors and graded staff officers, advise the CAS on policy matters affecting their areas of specialization. All the air officers report directly to the CAS.

14. In addition, to the 5 staff branches, the offices of Air Secretary, Director of Finance and Accounts, the Presidential Air Fleet, Project Implementation and Monitoring Team, the Secretary Tenders Board and NAF Foundation also report directly to the CAS. This is due to the peculiar nature of their duties. There is a HQ NAF Camp, which provides administrative support to the HQ NAF. Please note that the Air Force Institute of Technology in Kaduna currently reports directly to the CAS.

15. Now, to the functions of the branches, starting with the Policy and Plans Branch. The Policy and Plans Branch is responsible for formulating policy and the plans for the employment of NAF assets. The branch is therefore in charge of policy projections and budgeting, planning and implementation of NAF information technology requirements and maintenance of NAF archives. The branch comprises 5 staff directorates namely Directorate of Plans, Directorate of Policy, Directorate of Budget, Directorate of Information-

Communication Technology and Directorate of Museums and Archives.

16. Operations Branch is responsible for formulating policies and issuing directives on air defence, employment of offensive weapons, intelligence and training. The branch comprises 5 directorates. They are the Directorate of Operations, Directorate of Air Traffic Services, Directorate of Regiment, Directorate of Air Intelligence and Directorate of Training. The branch also maintains some operational oversight on PAF.

17. The Logistics Branch lays down policies on provisioning, procurement and maintenance of all equipment including aircraft, as well as infrastructure in the NAF. It comprises 5 directorates, namely: the Directorates of Air Engineering, Supply, Works, Armament and Electronics Engineering.

18. The Administration Branch makes policies and issues directives on administrative and welfare matters. The Branch is also served by 5 directorates. These are the Directorates of Administration, Medical Services, Legal Services, Air Provost, Public Relations and Information and the Directorate of Education.

19. Lastly, the Inspections Branch is responsible for inspections and evaluation of NAF operational readiness. To achieve this, the Branch is served by 5 directorates. These are the Directorates of Inspections, Evaluation, Safety, Research and Development and the Directorate of Manuals.

20. The Air Secretary is responsible for the formulation of policies for manpower development including recruitments, postings, promotions, retirements and resettlement. There are 2 directorates and 2 units under the office of the Air Secretary. The directorates are the Directorate of Personnel Management and that of Recruitment, Reserve and Resettlement. The units are the Automated Data Processing Unit located at Abuja and Personnel Management Group which is in Ikeja.

21. At the field level, the NAF has 3 operational commands and 2 direct reporting units. These commands, which are functionally grouped, are the Tactical Air Command, the Training Command and the Logistics Command. Please recall that Pay and Accounting Group (PAG) and the Personnel Management Group (PMG), both located at Ikeja, are autonomous field units that report directly to HQ NAF.

22. The commands are headed by Air Officers Commanding (AOCs) each being assisted by a Senior Air Staff Officer (SASO). The SASO acts for the AOC in his absence. The commands are further organized into groups/depots commanded by commanders. Groups/depots are organized into wings/centres headed by Commanding Officers (COs). Wings/Centres are broken down into squadrons, which are commanded by officers commanding (OCs) while squadrons are made up of flights headed by flight commanders. All units that are co-located are supported by either a Base Services Organization or a Base Services wing, depending on the size or number of the units at the location.

23. In the NAF, the strength of a unit is primarily based on the number of aircraft, equipment holding or assigned role. This is unlike in the NA, for instance, where there are a predetermined number of personnel for a section, platoon, company and so on. For the purpose of comparison, we can equate the units in the NAF to those of the NA as follows:

- a. A command is equivalent to a division in the NA.
- b. A group, to a brigade.
- c. A wing, to a battalion.
- d. A squadron, to a company.
- e. A flight, to a platoon.
- f. A section, to a section.

TACTICAL AIR COMMAND

24. Tactical Air Command (TAC) is responsible for interpreting, implementing and controlling NAF operational plans. At the peak is HQ TAC with 10 units under command. These are 33 Logistics Group (Log Gp), 35 Base Services Group (BSG), 45 NAF Hospital (NAFH) and 64 Air Defence Group (ADG) all in Makurdi. Other units are 75 Strike Group (STG) Yola, 81 Air Maritime Group (AMG) Benin, 88 Military Airlift Group (MAG) and the National Air Defence Corps (NADC)

both at Ikeja. Others are the 99 Air Weapons School (AWS) Kainji and the 97 Special Operations Group (SOG) Port Harcourt.

25. Please note that the NAF units in Ibadan, Minna, and Calabar are detachments. Note also, that some wings are not co-located with their parent units. For example, 204 Wing Maiduguri is a component of 64 Air Defence Group, while 227 Wing Ilorin is part of 88 Military Airlift Group. It is through these various units that TAC projects and executes operational plans. It is pertinent to point out that all combat aircraft in the NAF are operated by this command.

TRAINING COMMAND

26. The next command we shall consider is the Training Command (TC). Among the prerequisites of operational effectiveness is the availability of well-trained personnel. The NAF therefore, places much emphasis on training to ensure maximum readiness at all times. HQ TC, located at Kaduna, is chiefly responsible for implementing NAF training policies. It is to the credit of the NAF that at present she conducts about 75% of her training locally. This is achieved by using all available training facilities in the country and at the same time expanding her existing schools to cope with the extra intakes from sister African countries.

27. The Command is made up of 9 units, namely: 301 Flying Training School (FTS) Kaduna, 303 FTS Kano and 305 FTS Enugu. Others are 333 Log Gp Kaduna, Air Force Institute

of Technology (AFIT) Kaduna, 325 Ground Training Group (GTG) Kaduna, 330 NAF Station Jos, 335 BSG Kaduna and the 345 NAFH Kaduna. Each of these groups mentioned except 335 BSG and 345 NAFH has one or more specialized schools that train personnel relevant to the manpower needs of the NAF.

LOGISTICS COMMAND

28. Without adequate logistics backing to the commands discussed so far, they would be unable to function effectively. Hence, the third command, the Logistics Command (LC) was established. The task of the LC is to procure, maintain and sustain equipment in a state of operational readiness and at a minimum cost consistent with NAF mission requirements.

29. To enable her perform these functions, the Command is organised into 6 units, namely: 407 Equipment Supply Depot (ESD), 401 Aircraft Maintenance Depot (ACMD), 403 Electronics Maintenance Depot (EMD), 435 BSG, 405 Central Armament Depot (CAD) and the 445 NAFH. These units are all located in Lagos except 405 CAD, which is at Makurdi.

NIGERIAN AIR FORCE ROLES AND CAPABILITIES

NAF ORBAT

30. An overview of NAF Order of Battle (NAF ORBAT) will precede the discussion of NAF roles and capabilities. An ORBAT simply means the composition and deployment of a

fighting force for battle. It can be men, ships or aircraft. In the NAF, the ORBAT simply refers to the aircraft types on inventory and consists of the following aircraft:

- a. **MiG 21**. The MiG 21 was manufactured in the former Soviet Union. It is without any doubt, the most widely used and prolific fighter aircraft of the post World War 2 era. It is a single seat, fighter interceptor with a maximum speed of about 2,285 Km/h. It also has a 2-seater version for training. The NAF MiGs are deployed in the air defence, ground attack and reconnaissance roles.
- b. **Alpha Jet**. The NAF Alpha Jets, which were manufactured in Germany, are utilized in the ground attack and reconnaissance roles. It is also used for fighter training. This aircraft type was used during ECOMOG operations in Liberia and Sierra Leone.
- c. **L-39ZA and MB-339**. There L-39ZA and the MB-339 aircraft are used for basic training of NAF fighter pilots. These 2 aircraft types could be re-rolled as ground attack fighters if the need arises.
- d. **C-130 and G222**. The C-130 is engaged in long and medium range airlift of passengers and cargo; while the G222 is engaged in medium range transport airlift roles.

e. **DO 228 and DO 128-6.** The DO 228 and DO 128-6 are light transport aircraft used mainly for light liaison and VIP airlift. The NAF has 2 variants of the DO 128-6. One is employed in the light transport and reconnaissance roles while the other is for maritime surveillance.

f. **Helicopters.** The NAF helicopter fleet consists of the Super Puma, Mi-34, Mi-24 and Mi-35. The Super puma is a multi role helicopter utilized for tactical airlift, assault support, search and rescue, medical and casualty evacuation. The Mi-34 is used for helicopter flying training, while the Mi-24 and Mi-35 are tactical gunship helicopters designed for air assault. Both can also land a section of infantry and support the section from the air with gunfire, rockets and anti-tank missiles.

g. **Air Beetle.** The Air Beetle is a primary fixed-wing trainer. Please note that the Air Beetle is assembled in Nigeria.

31. The NAF has in its inventory some aircraft that have been decommissioned. These aircraft are the Jaguar aircraft, which was used primarily for interdiction; the Fokker 27 Maritime Patrol Aircraft and the BO 105 attack helicopter. However, the Federal Government is making efforts to replace them with new platforms. The new aircraft being expected are the Chinese built F-7NI (which would be used primarily in the air defence and recce roles), 2 x ATR-42 Maritime Patrol

Aircraft and the light utility/attack variant of the Agusta 109 helicopter.

NAF ROLES

32. The NAF is a tactical air force. A tactical air force is any air force primarily designed to complement land and sea forces; and by implication is limited in reach. It is for this reason that the NAF adopts the CONOPS of ACTIVE DEFENCE, FORWARD ENGAGEMENT, which in broad terms implies the NAF is strategically defensive but tactically offensive.

33. The discussion of NAF roles will be hinged on the air power components which are; air defence, close air support, air interdiction, counter air operations, search and rescue, air transport operations, maritime air operations and air reconnaissance.

AIR DEFENCE

34. One of the primary roles of the NAF as defined by the act establishing her is air defence. The essence of air defence is to prevent the adversary from effectively using air power against own forces or other national assets. This can be achieved by detection, interception and destruction of the adversary's aircraft before their offensive capability is brought to bear.

35. In time of peace or war, any unidentified aircraft that violates our air space would be intercepted; and destroyed if

necessary. This could be achieved by detecting any intruder on our early warning radars and scrambling our fighters to intercept them. The Surface-to-Air Missiles (SAMs) and the Anti-Aircraft (AA) guns would then engage those hostile aircraft that evade our fighters. The types of aircraft and equipment the NAF uses in include:

- a. MiG 21s.
- b. Radars.
- c. SAMs.
- d. AA Guns.

Please note that the on-going project on Total Radar Coverage of Nigeria (TRACON) will complement the air defence roles of the NAF.

CLOSE AIR SUPPORT

36. The provision of close air support to surface forces is another main function of the NAF. Close air support operations are conducted at the request of army or naval commanders within their areas of responsibility and at the front. Close air support operations are aerial attacks against targets, which are so close to friendly forces that detailed integration of each air mission with the fire and movement of own surface forces is essential. Close air support provides quick results and has the additional effect of raising the morale of friendly forces. As

modern wars are swift and fluid, extensive support may have to be provided within a short time to ensure a favourable outcome. The Alpha-Jet, Mi-24 and Mi-35 helicopter gunships fulfil this role.

37. Although close air support operations boost the morale of surface troops, there could be many problems when communication breaks down between the Services. This can be illustrated using the following scenarios:

a. In the first scenario, a field commander had requested close air support for a given Time on Target (TOT), and had given the adversary position as Area Bravo. However, following an unexpected advantage, the friendly forces dislodged the adversary and occupied the position. Meanwhile, the field commander had forgotten to cancel the request for close air support, which he had earlier made. As should be expected, the air support, quite characteristically, arrived on target at the appointed TOT. Unfortunately, the pilots, unaware that friendly forces have overrun the position and unknowingly unleashed their weapon load on target. This scenario has occurred several times in real life.

b. The second scenario is a problem of identification. Here, a friendly aircraft, for purely tactical expediency, had approached a battle area from an unexpected direction. Own field forces, which mistake it as hostile, open fire on it. This is also a consequence of communication failure.

AIR INTERDICTION

38. Air interdiction covers those operations aimed at destroying or neutralizing the adversary's military potential before it can be brought to bear effectively against friendly forces. Such operations are carried out at such a distance from friendly forces that detailed integration of specific actions with own forces is not required. In this context, the adversary's military potential includes those forces not engaged in close combat; his supplies and means by which the supplies are moved forward such as assembly areas, roads, railways, bridges, convoys and storage areas.

39. The NAF front-line aircraft in the interdiction role was the Jaguar. The Alpha Jet and MiG 21 may also be used for the same purpose though in a secondary role.

COUNTER AIR OPERATIONS

40. Another main function of the NAF is the application of direct pressure on the adversary's military capability by attacking his vital military, industrial and economic centres. Such operations are called counter air operations. Counter air operations are dedicated to seek and destroy the adversary's air power as close to its source as possible. Specifically, it involves attack on airfields, command and patrol posts, communications facilities, fuel and ammunition storage sites, radar sites and adversary air defence systems. Such facilities could, of course, be well defended. So, if counter air

operations are to be successful, the attacking aircraft must be adequately equipped to cope with en route and terminal defences, locate the target without unnecessarily exposing itself, and accurately deliver its weapon load on the target.

41. The main aircraft employed in this role was the Jaguar, which is capable of delivering bombs, rockets and missiles. It has a fairly good endurance for this role and is well equipped for low level navigation, night operations and the suppression of enemy air defence (SEAD) systems.

AIR TRANSPORT OPERATIONS

42. If air power is to be used to maximum effect, men and materials must be moved more rapidly than can be done by land and sea. This can be achieved through tactical and strategic movement of land forces, delivery of airborne forces into battle areas and evacuation of casualties from the war front. However, air transport aircraft can operate effectively only where a high degree of command of the air exists or in areas where they will be relatively free from adversary interference.

43. The NAF being a tactical air force has the capability to carry men and materials within an area of operation in support of a tactical plan. These operations include airborne operations, air logistics support, casualty evacuation, airborne command post and special missions. Special missions may involve such psychological operations as leaflet dropping and

voice broadcasts. In the NAF, the platforms for this role are the Hercules C-130, DO 228 and DO 128 aircraft.

MARITIME AIR OPERATIONS

44. The NAF also operates over the sea under the air power component called maritime air operations. Nigeria's coastline is about 420 nautical miles long and, like most independent nations of the world, she has an Exclusive Economic Zone of 200 nautical miles. This makes a total of 84,000 sq nm miles of water, which needs to be closely guided against intruders. It would be an enormous task for only the Navy to maintain the required security and control over such a vast expanse of water.

45. It would take a ship at cruising speed about 30 hours to travel from the Benin Republic border to our border with Cameroon. The Alpha Jet would cover the same distance in about 30 minutes after take-off. Therefore, for adequate control of the sea, the air force's characteristics of flexibility, mobility and high speed must be fully exploited to complement the efforts of our naval forces. Aircraft have the inherent advantage of being able to cover larger areas in less time than surface vehicles. The NAF had maritime operational capability with her F-27 and DO 128-6 maritime aircraft. The ATR-42s would meet the maritime patrol needs of the country.

AIR RECONNAISSANCE AND SEARCH AND RESCUE

46. **Air Reconnaissance**. The purpose of air reconnaissance is to obtain accurate and timely intelligence about an adversary or potential adversary. The information obtained can vary from those required for strategic planning to immediate observations which could determine the outcome of a battle. The NAF is capable of conducting tactical reconnaissance, which would provide information about military and other targets within defined areas of operation. The Alpha-Jet, MB 339 and DO 128-6, when fitted with recce pods, can be re-rolled for reconnaissance purpose.

47. **Search and Rescue**. One other important role yet to be fully exploited in the NAF is search and rescue. Search and rescue operations in the NAF have been of a limited nature, but suffice it to say that all NAF aircraft can perform search operations, but only the Mi-24, Mi-35 and the Super Puma helicopters can be used for rescue operations.

CONCLUSION

48. The absence of own air force, before independence in 1960, forced Nigeria to depend on foreign air forces for the movement of Nigerian contingents to and from the theatres of multi-national operation, in fulfilling her international commitments. To fill the vacuum, the Air Force Act of 1964 established the Nigerian Air Force to, among other things; provide a full complement to the military defence system of Nigeria.

49. Foreign assistance was sought and obtained to establish the NAF and it was fashioned after some Western air forces. Before the Nigerian Civil War, there was only one base located at Kaduna. However, to cope with war time exigencies, ground attack and medium transport aircraft were introduced into the service. After the Civil War, additional units came into existence and more aircraft were acquired.

50. Currently, HQ NAF is organized into 5 staff branches for policy formulation. These are the Policy and Plans, Operations, Logistics, Administration and Inspections Branches. There is also the office of the Air Secretary and direct reporting units under the CAS. There are 3 commands; Tactical Air Command, Training Command and Logistics Command, which are for policy interpretation and implementation.

51. The NAF ORBAT comprises aircraft of diverse primary capabilities and some of them can be re-rolled for secondary functions. These aircraft are utilized to fulfil the requirements of air power components of the NAF. Hence, the NAF is capable of conducting air interdiction, close air support and reconnaissance using the Alpha-Jet. The Super Pumas, Mi-24 and Mi-35 helicopters are used for air assault, search and rescue; while the C-130 and G222 are employed for medium and long-range airlift.

RECOMMENDED READING

1. NAF Basic Air Power Doctrine 2004.
2. AP 3000 – British Air Power Doctrine.
3. US Air Force Doctrine Document 1 – Air Force Basic Doctrine.
4. Royal Air Force Air Operations.
5. The Air Campaign, Planning for Combat by John A. Warden III.

Enclosure:

1. Organization Chart of the NAF.

**Jaji – Kaduna
Aug 2008**

**AOA
COO**

RESTRICTED

INTENTIONALLY LEFT BLANK

RESTRICTED

ORGANIZATION CHART OF THE NIGERIAN AIR FORCE

