



AERODYNAMICS OF POLITICS AND STABILITY OF STATECRAFT IN THE NIGERIAN PROJECT

DII, Christian Tsaro

Department of International Relations & Diplomacy

Baze University, Abuja

christain.dii@bazeuniversity.edu.ng

ABSTRACT

The study on aerodynamics of politics and stability of statecraft in the Nigerian project sought to explain the stability of statecraft in the Nigerian project from the perspective of aerodynamic stability of an aircraft. The purpose was to examine the stability of statecraft in the Nigerian project from the backdrop of aerodynamic stability of an aircraft in flight. Its adopted methodology was hinged on the conceptual and historical frameworks as well as strategies of inquiry such as grounded theory. The study was anchored on the systems approach theory for its theoretical framework. It established that statecraft responded to political, economic and environmental forces similar to aerodynamic forces acting on the surfaces of an aircraft. It also identified the fuselage of the aircraft as akin to the constitution of the state in statecraft. It concluded that the Nigerian project statecraft will attain greater stability if it were restructured to conform to the *semi-monocoque-fuselage statecraft constitution* of 1963.

Keywords: Aerodynamics, Fuselage, Monocoque, Politics, Semi-monocoque, Stability, Statecraft, Truss

INTRODUCTION

The term politics is both an art and a science that deals with power, power relations, decision making, status, allocation and distribution of resources amongst individuals in a state. It is a branch of social science that studies the art of governance and the government of a country (Edu, 2022). The very art of conducting government business and public affairs; art of skillfully managing governmental affairs to the benefit of individuals and development of a nation is statecraft (Norwich, 2018). Therefore, statecraft will encompass all actions taken by individuals and personalities that contribute to the governing of a nation domestically and diplomatically. Those individuals who most effectively use the art of statecraft to good advantage of their countries are known as statesmen. Statecraft exist in various sub-categories based on the different sectors in the governance of a nation. For instance, it exist in the economic sector, diplomatic, military, information, social, education and entertainment sectors of a country among others.

When an object moves through the air, it reacts to aerodynamic forces. Aerodynamics is the way that air moves around an object or thing that passes through the air (George, 2009). An object moving through the air is considered to be in flight and therefore will respond to the four forces of flight which are lift, weight or gravity, thrust and drag. For an object that is heavier than air to be airborne, it certainly will have some features and characteristics that will enable its ease of movement through the air. One of such characteristics is that the object must be aerodynamically stable with a configuration that enables lift to overcome weight and thrust to overcome drag.

There is hardly any successful statesman in contemporary times that does not fly an airplane in conducting the affairs of their state. Some and indeed many statesmen have private jets dedicated to the business of governance to ensure smooth and timely attention paid to the matters of the state. So much engineering and design practices are involved in the manufacture of those luxury jets that enable the statesmen to perform effectively in administering the affairs of their states. If by design and engineering practices, an object that is several kilograms heavier than air is made to move comfortably through the air and lands safely at another destination, then there has to be lessons that can be learnt from aerodynamic principles in the conduct of statecraft productively. Can similarities be established between the features of statecraft and those of an aircraft in attaining stability in state operations?

Statecraft responds to certain dynamic forces of nature, the environment and human actions like an airplane will respond to aerodynamic forces in flight. As the aircraft attains stability in flight under certain flight control configurations and conditions, so also statecraft attains stability under certain state control features and mechanisms. An airplane is stable when it has the ability to return to the same particular condition of flight (after having been slightly disturbed from that condition) without any efforts on the part of the pilot (Cutler, 2015). Similarly, there is statecraft stability in a nation when it can return to stable political, economic and security order after local or external distortions without intervention by the leader of the statecraft.

An airplane is said to be unstable in flight when it tends to move farther away from the original position after slight displacement (Cutler, 2015). However, it is considered to possess neutral stability when it remains in its new position as displaced which sometimes is a very desirable feature for the aircraft. In the same vein, statecraft can be reckoned to be unstable when any slight disruption or protest moves the nation further into chaos and ungovernable state. On the other hand, statecraft may be considered to have neutral stability when the country remains in the new position of deliberate and positive displacement by the forces from statecraft.

The purpose of this paper is to examine the stability of statecraft in the Nigerian project from the backdrop of aerodynamic stability of an aircraft in flight. The paper will be discussed in nine segments. The first section gives the introduction of the subject whilst section two will trace briefly statecraft in the Nigerian project from inception to the present. In sections three and four, the theoretical framework and methodology of the study will be discussed whilst attempt will be made to identify and match the characteristic features of statecraft with that of an aircraft in section five. Equally, section six will describe the aerodynamic forces and juxtapose them with the forces that drive statecraft in a nation. Thereafter, section seven will discuss the stages of flight comparing

them with stages of economic development in a state. Then section eight will examine the flight controls and degrees of freedom to maneuver an airplane with regards to maneuverability of statecraft to achieve stability. The conclusion of the paper will then be given in section nine.

Statecraft and the Nigerian Project from Inception

Prior to 1914, there was no Nigerian project but components of ethnic nationalities that through gun boat diplomacy the colonialists had forced into two administrative units called the Southern and Northern Protectorates (Jega, 2001: 90-91). Owing to the non-viability and non-profitability of the Northern Protectorate and the supposedly high administrative cost of governance borne by Her Majesty Government, it was decided that the most viable option was to merge the two protectorates into one single entity so that the gains from the south will offset the cost of governance in the north (Tamuno, 1998:15). Thus, in 1914 the imperial power announced the birth of a new nation they called Nigeria and that began the Nigerian project. It should be noted that the forces that drove the Nigerian project were external imperial interests and not the inter-group interests that should naturally coalesce to give birth to a nation-state. "It is certain that the very foundations of Nigeria ... from inception was never conceived to bring about a united political entity but an arrangement for resource extraction, exploitation and deprivation of the South to service the North which is still the case today" (Dii, 2022, pg. 125).

Reacting to the disaggregated and incongruent nature of the political entities within the Nigerian project, Meredith (2011) described Nigeria as a "House Divided" which depicted the political fortunes of the country put together by the colonial masters in 1914. However, Ajayi (2016) argue that there was no proper "House" abinitio since Nigeria was a unilateral colonial creation (Ajayi, 2016, pg. 37) and as such there could be no division in it. Two prominent post-colonial leaders of the country stated categorically that Nigeria was not a nation. First, Awolowo (1947) emphatically wrote in his book that "Nigeria is not a nation. It is a mere geographical expression" (Awolowo, 1947 pg. 47-48). Secondly, Sir Abubakar Tafawa Balewa who later became the Prime Minister declared on the floor of the legislative council that:

"Since 1914, the British has been trying to make Nigeria into one country, but the Nigerian people themselves are historically different in their backgrounds, in their religious beliefs and customs, and do not show themselves any sign of willingness to unite...Nigerian unity is only a British intention for the country" (cited in Ayu, 2104 pg. 2).

In managing statecraft in the Nigerian project, Suberu (2019) assert that Nigeria has sought to redesign constitutional institutions to contain inter-group conflict and that the struggle to stabilize Nigeria's fragmented society has seen wide-ranging institutional experiments. He continues that statecraft has metamorphosed from "relatively decentralized, parliamentary federation of four ethnic regions to a centrist, presidential, 36-state, federalism after going through momentous constitutional transition over nearly thirty years of military rule 1966 to 1999, with a brief civilian interregnum 1979 to 1983" (Suberu, 2019 pg. 3). Perhaps the most comprehensive

account of statecraft evolution in the Nigerian project is given in Table 1 adapted from Nwabueze (1982).

Table 1: Nigeria's Constitutional Development, 1914 To Date

Name/Year of Constitution	Constitution-Making Authority	Major Feature(s)
Constitution of the Colony and Protectorate of Nigeria, 1914	Colonial	Amalgamated the Colony and Protectorate of Southern Nigeria and the Protectorate of Northern Nigeria, into a single colony
The Hugh Clifford Constitution, 1922	Colonial	Consolidated unification with predominantly appointed Legislative Council for the whole country, but with jurisdiction largely in Southern Nigeria.
Arthur Richards Constitution, 1946	Colonial	Brought Northern Nigeria under the Legislative Council, members of which included nominees of Regional Councils of the Northern, Western and Eastern groups of provinces into which Nigeria had been divided in 1939.
John Macpherson Constitution, 1951	Colonial	Quasi-Federal with three regions given defined independent legislative powers; introduced elected majorities in the Central and Regional Legislatures.
Oliver Lyttelton Constitution, 1954	Colonial	Thorough going Federal System, with specified powers to the Central Government, and residual Powers to the three regions.

Constitution of the Federation of Nigeria, 1960	Colonial	Independent Federal Parliamentary Country of the British Commonwealth.
Constitution of the Federal Republic of Nigeria, 1963	Civilian	Nigerian President as ceremonial Head of State replaced Queen; ended judicial appeals to UK; created fourth region in Mid-West
Constitution of the Federal Republic of Nigeria, 1979	Military	American-style Presidential Federal Model with 19 states.
Constitution of the Federal Republic of Nigeria, 1989	Military	Modified Presidential Federal System, including mandatory two-party system, 21 states, and greater local government autonomy.
Constitution of the Federal Republic of Nigeria, 1995	Military	Additional modifications, including elaborate ethnic power sharing, greater decentralization, 30 states, 13 percent resource revenue minimum for producing states, return to multi-parties.
Constitution of the Federal Republic of Nigeria, 1999	Military	Basically restored 1979 Constitution, but with 36 states and the 13 percent derivation principle.
Constitution of the Federal Republic of Nigeria, 1999 (as amended)	Civilian	Modest amendments to 1999 Constitution, including electoral reforms and entrenchment of the National Industrial Court.

Source: Adapted from Ben O Nwabueze, *A Constitutional History of Nigeria* (C Hurst and Company, 1982).

THEORETICAL FRAMEWORK

The paper is anchored on the systems approach theory by David Easton and will be complemented by Rostow's Five Stages of economic development as a supporting framework of analysis. According to Easton (1953), systems approach is that system of interactions in any society through which binding or authoritative allocations are made. From the environment, demands are made on the political system in the form of input (demands and support) and these demands are subsequently processed into outputs as authoritative decisions (Legislations or Acts). Through a feedback loop changes brought by those outcomes after conversions are channeled back into the system in the form of increased, intensified or modified demands and supports. The systems approach theory is a very useful approach for analyzing the international political system and linkage with the domestic. It also enables us to selectively identify and organize what is political when you look at the whole society as well as to identify the interrelationships of political phenomena. However, the systems approach theory is criticized for reducing the state into nothing more than a black-box that receives and shuns out inputs and outputs indifferently (Heywood, 1994). It is also seen as a conservative and ideologically oriented theory that tend towards maintaining the status quo (Abba, Abdullahi, Hamisu, and Alao, 2016). From the perspective of this study, the demands or inputs are likened to the dynamic forces acting on statecraft which are similar to aerodynamic forces on an aircraft and they produce effects termed outputs or outcomes that bring about the stability or instability of the statecraft.

METHODOLOGY

The methodology is hinged on the conceptual and historical frameworks. A conceptual framework is a written or visual representation of an expected relationship between variables. The conceptual framework is generally developed based on a literature review of existing studies and theories about the topic (Swaen, 2015). The independent variable in this study is the aerodynamics of politics whilst the stability of statecraft in the Nigerian project is the dependent variable. With regards to the historical framework, Currie & Walsh (2018) explained that the past is complex, contingent, and stubbornly ephemeral. Because of this, historians are often contrasted with paradigm scientists, juxtaposing the scientific aim for generality and the historical aim for local understanding. "Good history requires 'principles of selection' which guide in identifying the relevant and irrelevant aspects of the target episode: they tell us what to foreground, and what to background" (Currie & Walsh 2018, pg. 3). As Danto (1962) says, "Not to have a criterion for picking out some happenings as relevant and others as irrelevant is simply not to be in a position to write history at all" (Danto, 1962, pg. 167). Corroborating the idea, Chalmers (2016) states "Once we take on the task of writing a history of science we have to have some principle of selection which enables us to pick out relevant historical facts from irrelevant ones" (Chalmers, 2016, pg. 28).

In addition, the study also relied on strategies of inquiry such as grounded theory (Creswell, 2003). Grounded theory emphasizes becoming immersed in the data; that is being grounded so that embedded meanings and relationships can emerge (Patton, 2002). The immersion process is

derived from a French word which means “I root myself” as such to analyze the data we implanted ourselves in the data so that the resulting analysis grew out of that groundedness (Patton, 2002). The author is a licensed Aircraft Maintenance Engineer with several years of professional practice in aircraft engineering and a consummate student of political science. Therefore, his personal knowledge and experience is brought to bear to interpret and socially construct meanings based on experiences and knowledge background.

Characteristic Features of Statecraft Akin to an Aircraft

The aircraft is made up of three main parts that enable its flight in the air namely: fuselage, wings, stabilizing and control surfaces. The fuselage is the body to which the wings and tail plane are attached and which provides space for crew, passengers, cargo, controls, and other items, depending upon the size and design of the airplane. It should have the smallest streamline form consistent with the intended capacity and performance. There are three types of fuselage used in the design and construction of an airplane. There is the “*truss fuselage*” which 100% of its load forces by design are carried by the internal structure. Then we have the “*semi-monocoque fuselage*” designed to carry 50% load forces in the structure and 50% by the skin. Lastly, we have the “*monocoque fuselage*” designed for 100% load forces to be carried by the skin. The feature of statecraft similar to the fuselage is the constitution of the state. A state constitution is of the “*truss fuselage*” type if it is a unitary constitution in which all the powers of the state are borne by the centre and the components parts just follow the dictates. The Nigerian project statecraft assumed the status of a “*truss fuselage statecraft*” in 1966 when the military regimes of Aguiyi-Ironsi and Gowon by decrees abrogated the 1963 Constitution and the powers of the regional governments and replaced the constitutional regional arrangement with newly created 12-states structure. When an organization’s article of association is so loose that the component parts bear 100% powers and the centre only function as ceremonial head without executive powers that body is akin to the “*monocoque fuselage*” aircraft design. The “*monocoque-statecraft*” design would be likened to the arrangements with supra-national organizations like ECOWAS, AU and EU where the various member states retain their absolute sovereignty but would defer to the organizational body on some regional cooperative matters.

The state constitution will be similar to the “*semi-monocoque fuselage*” when it is a federally operated legal framework that shares equal powers between the centre and the federating units. The current 1999 Constitution (Amended) of the Nigerian project is neither unitary nor federal. The First Republic 1963 Constitution was somewhat similar to the “*semi-monocoque fuselage*” construction of an airplane. In Section 140 (1) it states that “There shall be paid by the Federation to each Region a sum equal to fifty per cent of - (a) the proceeds of any royalty received by the Federation in respect of any minerals extracted in that Region; and (b) any mining rents derived by the Federation during that year from within that Region” (FGN, 1963). Therefore, with regards to mining royalties and rents, the Nigerian project operated a “*semi-monocoque fuselage-statecraft*” through the 1963 Constitution which accounted for the relative stability and robust development within the Regions during that period. However, in the areas of executive powers

and distribution of funds in the distributable pool account, the structure of the federation was not strictly “*semi-monocoque-statecraft*” design. The executive powers were exercised in accordance to “*Exclusive, Concurrent, and Residual Lists*” which also ensured some relative stability in statecraft of the Nigerian project.

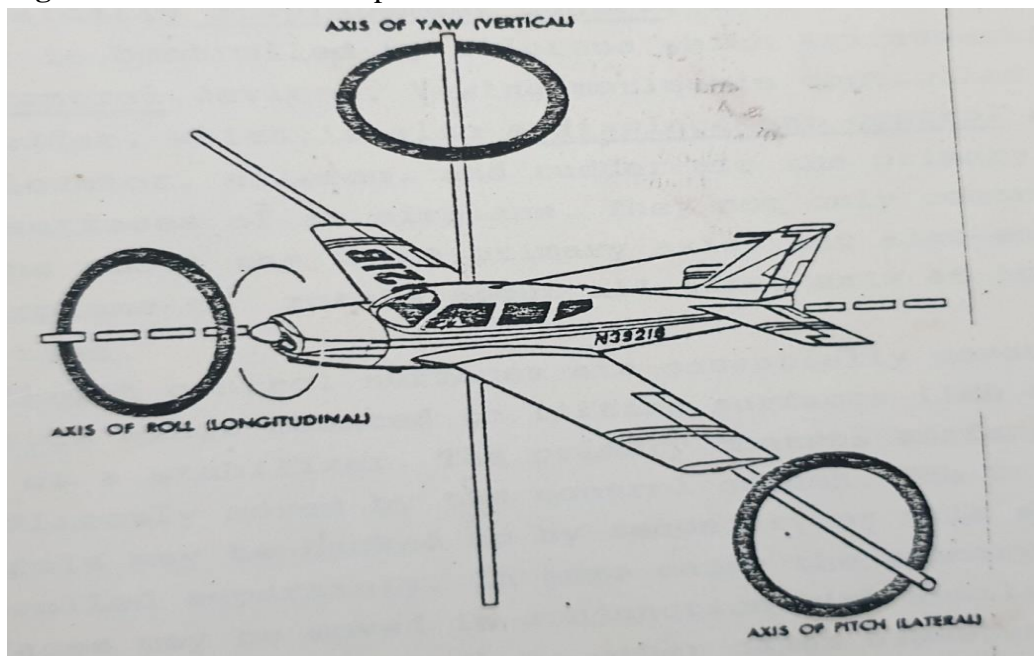
The other part of an airplane that ensures smooth movement through the air is the wing. The wing members are constructed with great strength to withstand bending stresses which are greatest during flight and upon landing. The design and construction of the wing determines the lift and performance of the aircraft. There are three types of wing construction namely: mono-spar, two-spar, and multi-spar wing constructions. A wing spar, sometimes called wing beam, is a principal span-wise member of the wing structure. Most jets, wide-bodied and high performance airplane are of the multi-spar wing design. The aspect of statecraft that can be likened to the wing is the diversities and internal cohesion of the state. The cohesiveness of the diversities (culture, ethnicity, religion, social and primordial forces) in a state determines its lift to weight ratio as well as the thrust to drag ratio and thus represents the “*multi-spar wing*” of statecraft in an airplane design.

The third main part of an airplane that ensures smooth air operations is the stabilizing and control surfaces. The stabilizing part is also called the “*empennage*” or the “*tail-plane*”. It is made up of three principal components namely: stabilizers, elevators and rudder. The stabilizers consist of the “*vertical stabilizer*” and the “*horizontal stabilizer*”. The control surfaces falls into two categories: primary and secondary control surfaces. The primary control surfaces include: *aileron*, *rudder*, *elevator* and *stabilator* whilst the secondary control surfaces consist of *trim tabs*, *flaps*, *spoilers* and *slats*. The “*stabilator*” is made up the stabilizer and the elevator. The “*aileron*” are the primary control surfaces which provide lateral control in flight. They control airplane movement about the longitudinal axis. Large jet airplanes have outboard and inboard ailerons. The “*inboard ailerons*” are used for high speeds whilst the “*outboard ailerons*” are used for landings and lower speeds. The “*rudder*” provides directional control of the airplane. It controls airplane movement about its vertical axis. They are statically and aerodynamically balanced to reduce control loads, and eliminate flutter. The “*elevators*” are the control surfaces which rotate or stabilize the airplane around the lateral axis. They are balanced statically and aerodynamically. The static balancing is achieved using weights whilst the aerodynamic balancing is achieved by setting the hinge line. The aspects of statecraft that corresponds to the stabilizing and control surfaces of an airplane are the statutory organs of government in a state – the executive, legislature and the judiciary. These institutions correspond to the primary control surfaces in statecraft. The secondary control surfaces will include: defence and security agencies, Independent National Electoral Commission (INEC), Economic Financial Crimes Commission (EFCC), Independent Corrupt Practices Commission (ICPC), trade and investment, industries, education, health and social sector institutions, political parties and civil society organizations amongst others. The static and dynamic balancing achieved within these organs of government determines the stability of statecraft and the state.

Aerodynamic Flying Controls versus Statecraft Control

However stable an aeroplane may be the pilot must have the means to control it. The standard system of control is by means of control surfaces, hinged at the tail plane, along the trailing edges of the wings, and at the rear of the fin. A movement of any particular control surface will cause a force due to the deflection of the airflow. The effectiveness of any particular control surface will depend, equally on its area, the distance from the axis which it is intended to turn the aeroplane, and the velocity of the air over the control surface. The aircraft has three degrees of freedom of movement in flight.

Figure 1: Three Axes of Airplane Movement



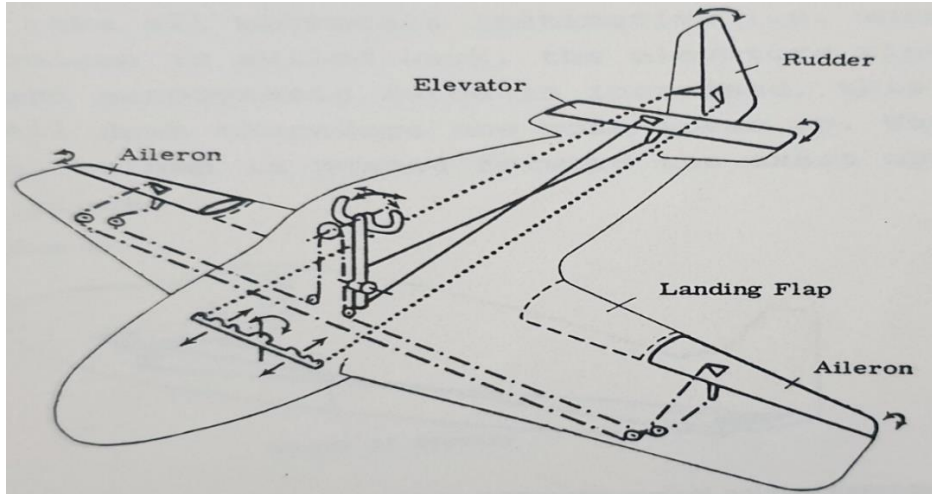
Source: DORNIER NAF Training Manual

The three axes relative to which an airplane moves in flight is depicted in Figure 1. They are the primary axes of control, and are designated the longitudinal axis, the lateral axis, and the vertical axis. The longitudinal axis passes length-wise through the fuselage. The lateral axis extends cross-wise, from wing tip to wing tip. The vertical axis passes vertically through the centre of gravity of the airplane. All three axes actually intersect at the centre of gravity of the airplane. The airplane is said to *pitch* in the longitudinal axis, *roll* in the lateral axis, and *yaw* about the vertical axis. Pitching and rolling may also be defined as movements about the lateral axis and about the longitudinal axis respectively.

Pitching motion is controlled by the elevators, which are basically *displacement control* devices. Rolling motion is controlled by ailerons which are essentially *rate control* devices. Yawing motion is controlled by the rudder, which is also a *displacement control* device. The elevator, aileron and rudder are primary control surfaces of an airplane. They not only control motions about the three primary axis, but also enable an airplane to rotate about all three axis at

the same time. Figure 2 below shows the primary flight control surfaces, their movements, and how they are linked to the control column.

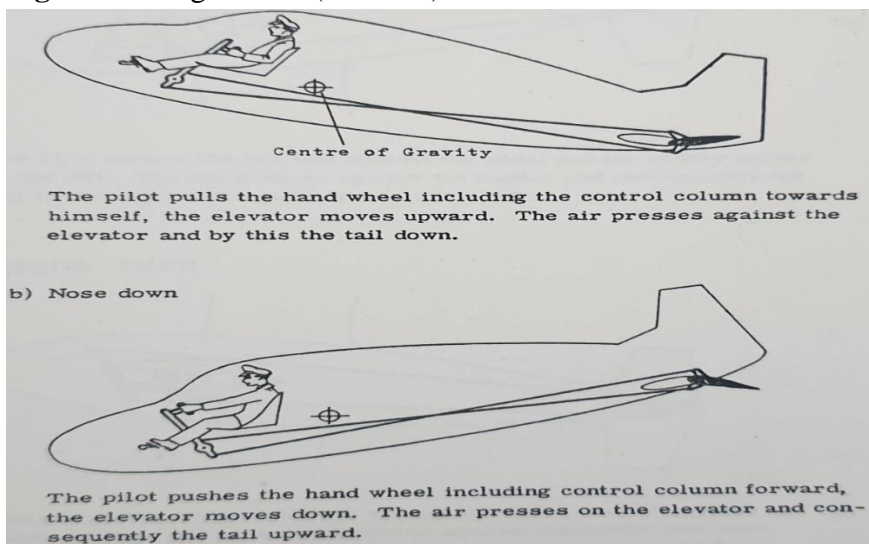
Figure 2: Primary Flight Control Surfaces and their Link to the Control Column.



Source: DORNIER NAF Training Manual.

Longitudinal (elevator) control is the control of the aeroplane about the lateral axis and is usually provided by the elevators, which are hinge-mounted to brackets on the trailing edge of the tail plane. The control column is connected to the control surfaces in such a manner as to make all movements instinctive. When the control column is pulled back, the elevators rise and the downward aerodynamic force is increased, this forces the tail down therefore the nose moves up. When the control column is pushed forward the exact opposite takes place as shown in Figure 3.

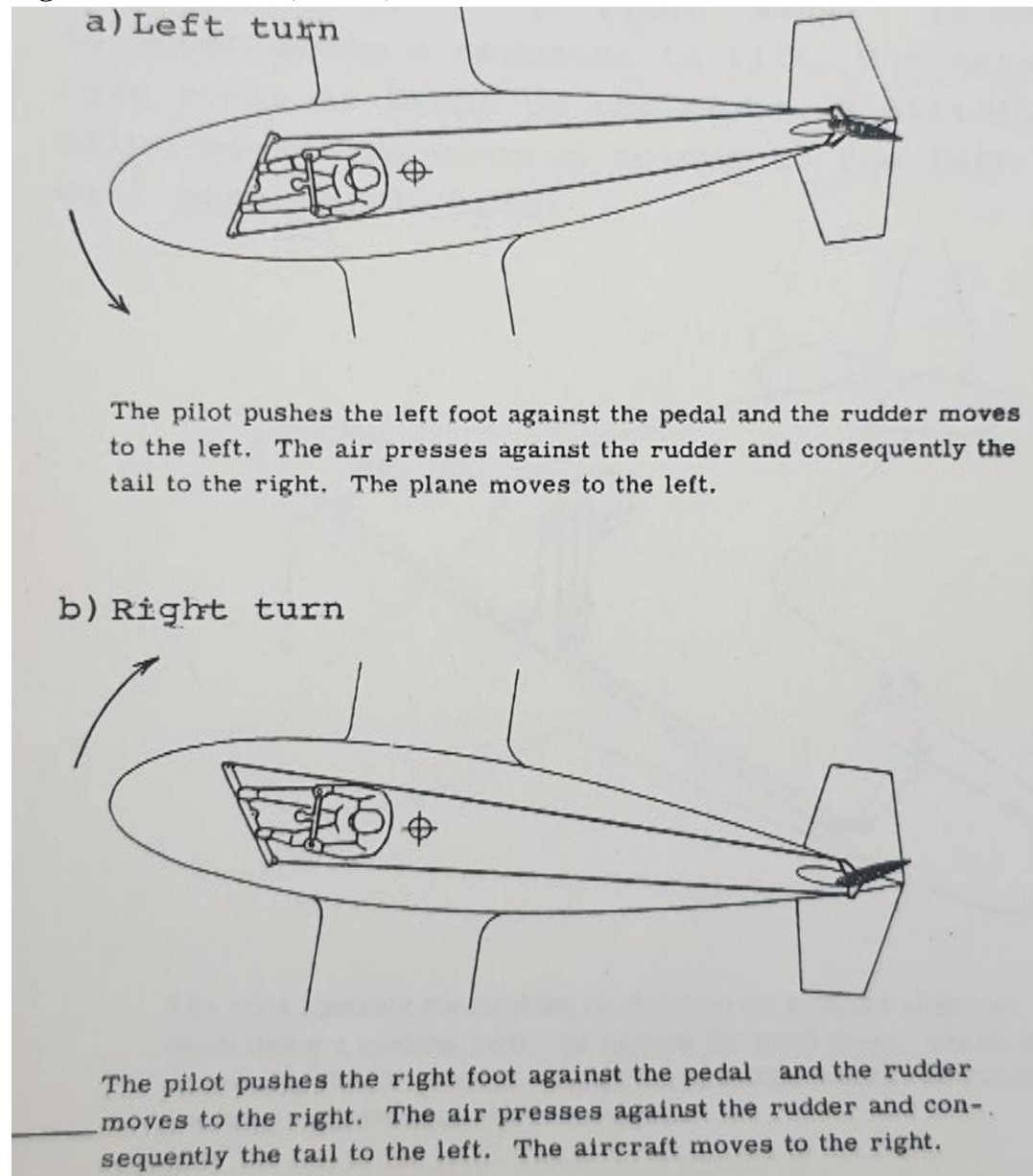
Figure 3: Longitudinal (Elevator) Control.



Source: DORNIER NAF Training Manual.

Directional (rudder) control of the airplane is by means of the rudder, which is hinged to the trailing edge of the vertical stabilizer. The rudder is usually connected by control cables to the rudder bar, to which the pilot's pedals are fitted. The right pedal is pushed forward to move the rudder to the right, and make the nose yaw to the right. Similarly, the left pedal is pushed forward to move the rudder to the left, and make the nose yaw to the left. In both cases the changed camber of the vertical stabilizer induces a pressure difference between the two sides to create a yawing motion proportional to rudder displacement as depicted in Figure 4.

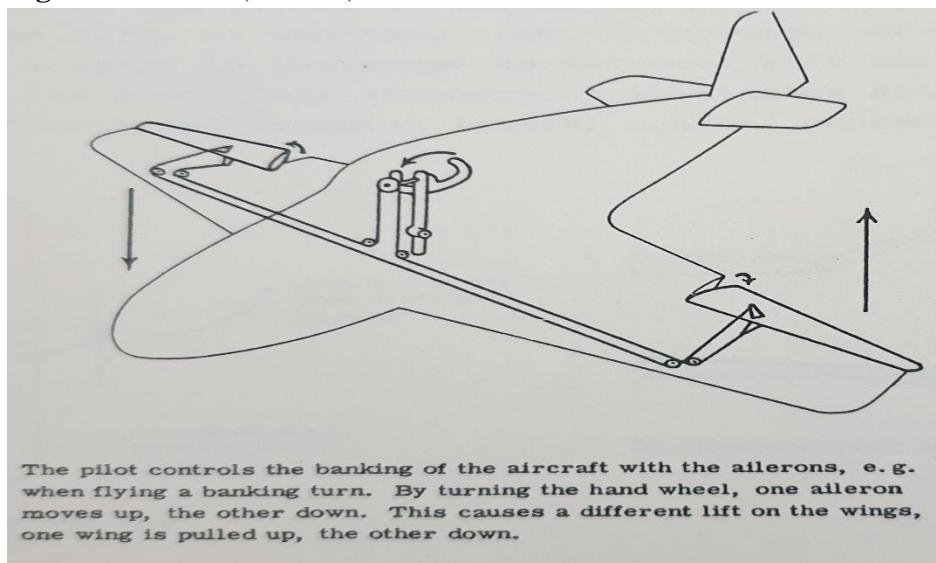
Figure 4: Directional (Rudder) Control.



Source: DORNIER NAF Training Manual

Lateral (aileron) control is control about the longitudinal axis and is provided by means of two control surfaces called ailerons. The ailerons are movable surfaces hinged to the rear of the wings and form part of the trailing edge. They are connected to the control column so that when the column is moved to the right, the left aileron is lowered and the right aileron is raised. The lowered left aileron increases the camber of the left wing, to increase the lift produced by that wing. At the same time the camber of the right wing is decreased and it experiences a decrease in lift. The aeroplane therefore rolls or banks to the right. Similarly, if the pilot moves the control column to the left the aircraft will bank to the left. The lateral control movement is shown in Figure 5.

Figure 5: Lateral (Aileron) Control.



Source: DORNIER NAF Training Manual.

The aspects of statecraft that corresponds to the primary control surfaces that produces the pitching, yawing and rolling motions in an airplane are the executive, legislature and the judiciary arms of government. The executive sits at the control column to manipulate statecraft to pitch, yaw or roll. The directional control of a state is anchored by the judiciary ensuring that statecraft is steered along the path of justice, equity and fairness as enshrined in the constitution of the state. The legislature populated by the sovereign representatives of the people provide the lateral control to bank or roll statecraft either to the left or right direction through constitutional amendments and statutory laws enactments. The coordination of all these control forces to produce pitching (climb or descent) motion in statecraft is what the executive works to achieve. All these movements in the aircraft occur through the centre of gravity which must be maintained through design, operational configuration and intended performance of the airplane. Similarly, the internal cohesion and unity in statecraft forms the centre of gravity about which the climb or descent motion, yaw or left/right turn, and roll or bank left/right of a state must occur in statecraft.

Flight Control Systems and Degrees of Freedom in Statecraft

There are three main classification of flight control systems in aircraft technology. We have the manually operated systems, power-assisted systems, and power-operated systems. The manually operated systems are as its name depicts, are manual control systems. The movement of the control surfaces are operated manually by the pilot. These are most suitable in small trainer aircraft types for the pilots to develop the skill and feel of the load forces acting on the aircraft. This type of flight control system is similar in statecraft to personality driven states with little regard to state institutions. The power-assisted systems in aircraft operations are those that the movement of the flight control surfaces by the pilot is assisted by hydraulically powered motors and electronic sensors. Most wide-bodied jets and airliners as well as fighter jets are designed to be power-assisted because the pilot's strength cannot handle the high load forces acting on those surfaces in flight. The statecraft configuration that is similar to the power-assisted flight control systems is one that harbours strong institutions and strong leadership personalities. These are found in advanced democracies like the US where no individual is above the law not even the president. The power-operated systems are those that are solely operated by autopilot from start to finish. You find this type of systems in unmanned aerial vehicles (UAV) where the operator only feed the electronic data into the computer system and it will operate itself based on the fed data inputs into the system. It is inconceivable at the moment to find any statecraft model operated without strong leadership.

One factor that is common in all three categories of flight control systems is that there must be a pilot and a good one for that matter. Every wide-bodied long hull commercial flights are power-assisted and once cruising altitude has been attained, the pilot switches to autopilot mode. However, when in adverse weather conditions, during climb or descent, the aircraft must be switched back to manual mode. There are five stages of flight in every one flight envelope: take-off, climb, steady flight at cruising altitude, glide back or descent, and landing. Of these five stages, the aircraft may be operated on autopilot in three stages but the take-off and landing stages must be operated on manual control for passenger aircraft. These stages of flight in statecraft can be likened to the stages of economic development from the perspective of Rostow's economic growth stages.

Stages of Flight versus Stages of Economic Development

There are five stages in an aircraft flight circuit which are:

1. Take-off
2. Climb
3. Steady flight at constant height
4. Glide back or descent
5. Landing

According to Rostow (1959), there are identified five stages of economic development which statesmen operating statecraft strive to achieve up to the final stage and these are:

1. Traditional society

2. Preconditions for take-off or self-sustaining growth
3. Take-off
4. Drive to maturity
5. The stage of high mass consumption

The description of the traditional society and the preconditions for take-off stages would conform to the key activities required to get the aircraft ready for take-off. The pre-flight activities involves visual checks, instrument checks, electrical checks, aircraft refueling, engine inspections documentations by engineers/pilot and filing of flight plan with air traffic services. All these occur before engine start-up, request for taxi and clearance from air traffic controllers for the aircraft to position for take-off. The traditional society is described as agrarian, subsistence agriculture mode with trade by barter as the main means of exchange. Although, it is a system not lacking in inventiveness and innovations, it is however lacking in systematic understanding and tools for high productivity. The transition from primitive production mode to industrialization, transport and infrastructure to support trade, technology, savings, investment, and entrepreneurship is termed the pre-conditions for take-off stage in economic development according to Rostow (1959). The Nigerian statecraft during its transition from traditional society to preconditions for take-off stage, established plantations (cocoa, cotton, rubber) and other cash crops to feed the textile mills and other cottage industries in the country. The practitioners of statecraft equally embarked on import-substitution-industrialization (ISI) to launch the country into the third stage of economic development which is the take-off stage (Rostow, 1959). Import substitution industrialization (ISI) is an industrial development program based on the protection of local infant industries through protective tariffs, import quotas, exchange rate controls, special preferential licensing for capital goods imports, subsidized loans to local infant industries, etc. (Ogujiuba, Nwogwugwu, and Kike, 2011). According to Bussell cited in Jackson and Jabbie (2020), the notion of ISI was meant to incorporate three stages namely: 'domestic production of previously imported non-durable consumer goods, extension of production to a wide-range of consumer durables and complex manufactured items and finally, exporting of manufactured goods, with the vision of diversifying to multiple range of items' (Jackson and Jabbie, 2020, pg. 3).

The aircraft takes off on full throttle power with the primary and secondary control surfaces all set in take-off configuration. It then takes off and make steady climb to attain cruising altitude. Once the steady flight altitude has been reached, the primary and secondary control surfaces are retracted and trimmed to ensure smooth airflow over the airplane surface. The take-off stage in Rostow's economic development involves increased industrialization, switch from subsistence agriculture to manufacturing, economic transition, new political and social institutions. In the Nigerian project statecraft, the take-off stage arrived with increased ISI and establishment of textile mills, petrochemical company, refineries, aluminum smelter plant, heavy vehicle and tractor assembly plants (ANAMCO) in Enugu, car assembly plant (PAN) in Kaduna, Ajaokuta, Aladja, Katsina, Jos, and Oshogbo steel complexes, tyres and other military hardware assembly plants in Bauchi. These various ISI enterprises created job opportunities for the citizens and reduced foreign

exchange demand for imported goods. The take-off stage of the Nigerian project statecraft was good and many new social institutions in health and education came on stream as well as new political parties and alliances. It achieved some good stability in the Nigerian project and quickly transitioned to the drive to maturity stage.

Attaining cruising altitude and maintaining straight and level flight in an aircraft would correspond to economic development in statecraft reaching the drive to maturity stage. According to Rostow (1959), the drive to maturity stage involves economic diversification, technology innovation, investment opportunities, less reliance on imports, and reduced poverty. The Nigerian statecraft entered that stage of drive to maturity when after implementing ISI and establishment of infant industries, the country embraced trade liberalization and free trade market economy. There were more investment opportunities and although poverty level seemed to have reduced, the reliance on imported goods did not decrease. In fact, the trade liberalization and free trade policy opened the economy for dumping of foreign goods which eventually suffocated the infant industries because they could not compete with economies of scale and cheap production costs of equivalent foreign goods. Whilst the industrialization policy of the country was gasping for breath to be above the waters in the global economic environment, the consumption of foreign goods increased astronomically and forced the country into a false stage of high mass consumption.

The stage of high mass consumption as postulated by Rostow (1959) is one in which the economy is geared towards mass consumption of locally manufactured goods. The production and utility functions reaches an equilibrium state that the service sector becomes dominant and the country enters into knowledge economic mode. This is the stage that guarantee statecraft stability and economic prosperity for the country. In aircraft operations, it is that stage of high altitude cruising flight when onboard catering services are administered and the pilots operate on autopilot. There is less turbulence at this stage of flight operations and the most relaxing phase of flight for passengers and crew. In the Nigerian project, statecraft administrations have not been able to steer the ship of state to progress from drive to maturity into that stage of high mass consumption. Although, there was expansion in the consumption of goods and services in the economy, they were as a result of dumping of foreign goods through free trade and economic liberalization. Consequently, the false-feel stability thought to have been attained was not sustainable and the Nigerian economy began its glide or descent back to where it took off from.

Indeed, no economy takes off in development and set out to descend and land despite the model of growth adopted. Besides the Rostow's western development model, the Asian Tigers Akamatsu's Flying Geese Paradigm of import-production-export catching up model of growth (Kasahara, 2004) ensures that an economy takes off and attains sustainable high mass consumption stage without any glide back. When an aircraft is in take-off phase, the pilot does not suddenly reduce the power from full throttle or deploy the spoilers (airbrakes) as that will cause the airplane to lose lift and crash. However, during landing of the aircraft, the throttle power lever is reduced to idle, airbrakes are activated and thrust reverser also deployed to break the speed of the aircraft. In politics and statecraft, sometimes spoilers are activated either wittingly or unwittingly by the policy decisions of the practitioners and full throttle is brought to either reduced power or idle

position and that truncates the take-off lift in economic development initially achieved. For instance, the Nigerian project enunciated the ISI policy to move the economy from take-off stage to cruising heights of drive to maturity. The steel rolling mills and petrochemical companies/refineries were supposed to be located in places where the raw materials needed for operation and production were abundant. However, Thom-Otuya, Ikechi and Tamuno (2010) observe that the decision to locate those core industry projects (CIP) by the Nigerian statecraft operators at the time were dominated by non-economic considerations. The political desire to spread CIP around the country meant locating the plants in areas that lacked the basic raw materials and too expensive to carry out the intended production. Adetayo cited in Thom-Otuya et al (2010) argue that management of mega projects like Ajaokuta (\$6.8 billion), petrochemical (\$2.6 billion), and aluminium smelter plant (\$1.4 billion) have been the major sources of waste in the Nigerian economy. Ekuehare (1996) opined that the problems of the Nigerian economy range from defective planning, corruption, inefficient management, lack of fund, low capitalization and executive interference. Those non-economic considerations, economic wastes (Thom-Otuya et al, 2010) and corruption as well as executive interference (Ekuehare, 1996) constitute the deployment of spoilers, thrust reverser and reduction of throttle power to idle position in the Nigerian project statecraft by the practitioners.

CONCLUSION

The stability of statecraft in the Nigerian project is a thing of concern to all and sundry. The statecraft is deemed to be stable if after any displacements or distortions in the political and economic landscape, it returns to its original position unaided. Equally, it is neutral stable if it remains in the positively displaced new position in statecraft (Cutler, 2015). Many authors have expressed the opinion that the Nigerian project have remained in a disaggregated and incongruent statehood since its establishment (Meredith 2011, Awolowo 1947, Ayu 2014). Nevertheless, the constitutional development and redesign of statecraft has continued to evolve since the creation of the Nigerian project (Suberu 2019, Nwabueze 1982). Constitutional developments in the Nigerian project statecraft have oscillated between the *semi-monocoque-fuselage statecraft* constitution to the *truss-fuselage statecraft* constitution, and to the current constitution that is neither *truss* nor *semi-monocoque* in form and spirit.

The wing structure of the Nigerian statecraft (ethnic diversities and internal cohesion) rather than being piloted by statecraft practitioners to produce enormous lift-weight ratio and thrust-drag ratio have been exploited by the politicians to expose the internal fissures and cleavages to the detriment of genuine development and statecraft stability in the Nigerian project. The stabilizing and control surfaces have to be manipulated by the pilots (ruling political party) as captain and the co-pilots (opposition political party/parties) to have smooth and stable political and economic development. The actions of the political gladiators whether ruling or in opposition must be complementary and supportive in every phase of development for the country to attain stability in statecraft. The operations of statecraft must be coordinated and deliberate to operate in the three primary axes of control: longitudinal, lateral and vertical axes concurrently to achieve statecraft

stability. Both the ruling and opposition political actors must maintain a positive *pitch-up moments* to lift the state into development and cruising heights; ensure *yawing moments* to steer the statecraft from bad weather, turbulence and clouds that causes bumpy flights and instability; and *roll or bank* statecraft right or left directions into developments of targeted sectors of the economy.

There is no known economy that is safely operated solely on manual mode in contemporary times. The Nigerian statecraft pilots must embrace *power-assisted levers* to attain and sustain cruise and development in the political and economic spheres of the country. Being cognizant of what stage of growth the economy is currently remains the key to knowing what flight configurations to adopt in order to achieve and maintain statecraft stability in the Nigerian project. For those CIP that have been deployed based on political expediency and non-economic considerations, the statecraft actors must have to summon the courage and political will to correct the anomaly to stem further economic waste of resources. It should however be noted that had the country continued operating the *semi-monocoque-fuselage statecraft* it had in 1963, such deployment of CIP on non-economic considerations might not have occurred. Ultimately, the Nigerian project statecraft will attain greater stability if it is restructured again to conform to the *semi-monocoque-fuselage statecraft constitution* of 1963.

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