

# MILITARY AFRICA

THE LEADING DEFENCE MEDIA IN AFRICA

MAY 2024



## 60-YEAR JOURNEY OF THE NIGERIAN AIR FORCE

Exclusive interview with Air Marshal HB Abubakar with Chief of Air Staff

AFRICA AIRFORCE FORUM Edition



# STRONG SUPPORT



**Mi-28NE**  
Combat helicopter



**ROSOBORONEXPORT**

Russian Defence Export

27 Stromynka str., 107076,  
Moscow, Russian Federation

E-mail: roe@roe.ru

www.roe.ru

Rosoboronexport is the sole state company in Russia authorized to export the full range of defense and dual-use products, technologies and services. Rosoboronexport accounts for over 85% of Russia's annual arms sales and maintains military-technical cooperation with over 100 countries worldwide.

ADVERTISEMENT

more info at  
**ROE.RU/ENG/**



**MILITARY AFRICA**

MAGAZINE

MAY 2024

**Editor-in-Chief**

Sarah Lesedi

**Editorial**

Ekene Lionel

**Creative Director**

• Patrick Kenyatte

**Correspondents**

- Darek Liam
- Patrick Kenyatte
- Kazim Abdul

**Publisher**

Lionstar Technologies

**Advertising and Editorial Enquiries**

Email: Business@military.africa

Tel: +234 810 368 9898

**Email**

Business@military.africa

Africanmilitaryblog@gmail.com

**Website**

www.military.africa

**Address:**

Wuse 2 district, Federal  
Capital Territory, Abuja, Nigeria



© 2024 Military Africa. All rights reserved.

This material may not be reproduced, distributed, transmitted, cached, or otherwise used without the prior written permission of Military Africa.

For inquiries or permissions,  
please contact:  
Business@military.africa

**FEATURED**



## 60-year journey of the Nigerian Air Force

The Nigerian Air Force has come of age, having undergone significant transformation in its organization, manning and equipment holding.

## CONTENT

### AEROSPACE

**Aircraft Modernization:  
A Look at the Nigerian Air Force's  
Fleet Upgrades**



**P: 13**

### UNMANNED SYSTEMS

**The Future of Flight:  
Unmanned Aerial Vehicles in the  
Nigerian Air Force**



**P: 18**

### INDUSTRY & BUSINESS

**Likely causes behind frequent  
helicopter crashes in Africa:  
Russian expert explains**



**P: 23**

### INDUSTRY & BUSINESS

**Mission-Ready:  
The Role of the Nigerian Air Force in  
Counter-Terrorism Operations**



**P: 28**

### UNMANNED SYSTEMS

**Redefining Warfare:  
The Rise of HAVELSAN's Digital  
Troops**



**P: 30**

### SECURITY

**Milkor 380:  
The largest armed UAV built in Afri-  
ca takes flight**

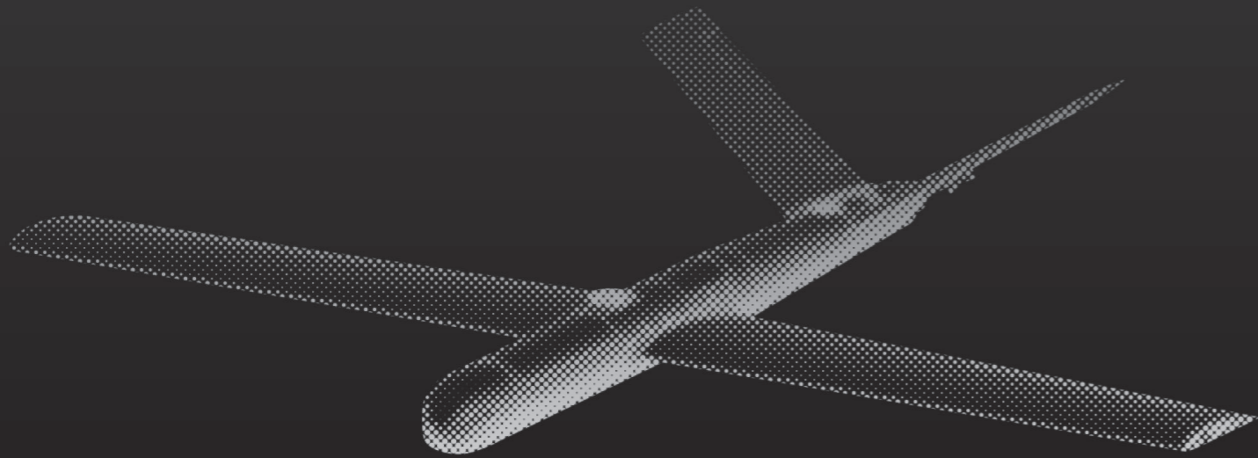


**P: 32**



# ZEEL

## AUTONOMOUS LOITERING MUNITIONS



### AI-based platform

AI-based loitering, visual detection and targeting



### GPS-denied operations

Capable of precise navigation without reliance on GPS



### C2 Integration

Ground control station with command & control integration



### Mobile multiple launchers

Configurable remote-operated mobile multiple launchers



### Distributed architecture

Decentralized architecture avoiding single points of failure



### Battle-tested

Proven itself in realistic battlefield scenarios

Autonomous complex solution with minimum human intervention designed to detect, target and strike mobile & static targets in GPS-denied environments

### TECHNICAL SPECIFICATIONS

	ZEEL A1	ZEEL A5	ZEEL A10
Wingspan & Length	2 x 1.4 m	2.5 x 1.5 m	3.8 x 1.5 m
Maximum Altitude	4000 m	4000 m	6500 m
Flight Endurance	> 50 min	> 90 min	> 150 min
Average Speed	75 km/h	75 km/h	80 km/h
Engine	Electrical	Electrical	Electrical
Combat readiness	< 20 min	< 20 min	< 20 min



FEATURED

# 60-year journey of the Nigerian Air Force

Air Marshal HB Abubakar with Chief of Air Staff



**R**eflecting on the 60-year journey of the Nigerian Air Force, what do you regard as its most noteworthy achievements in terms of advancing national security and regional stability?

Indeed, the Nigerian Air Force has come of age, having undergone significant transformation in its organization, manning and equipment holding.

At inception in 1964, the Service was barely able to carry out its primary responsibilities of defending the nation from the air, due to the few platforms that were available at the time. Accordingly, during the early years up to 1970, the Service relied solely on foreign partners such as the German Air Force Assistance Group for technical and non-technical training of its personnel.

Nevertheless, the Service was still able to par-

ticipate in the Civil War which started in 1967, as it rose up to the challenge in spite of its infancy. Over the years, particularly during its formative years in the 1970s up to 1990, the NAF underwent platforms/equipment upgrade, while new ones were also acquired.

The Service further experienced reorganization of its force structure, while bolstering its training and aircraft/equipment maintenance capacity. Between 1990 and 2000, the NAF underwent some expansion as it established new commands and formations, increasing its presence across Nigeria. Perhaps the most noteworthy achievements of the NAF, with regards to advancing national security and regional stability, have been recorded in the transformation era from 2000 till date.

The NAF contributed greatly to restoring peace in Liberia, Sierra Leone, Gambia and Mali at one time or another. The Service has acquired significant technical and non-technical capabilities and now has the capacity to conduct most

of its training in-country. The Service's foray into the use of Unmanned Aerial Systems and the increased use of Precision Guided Munitions has revolutionized our contributions to the Counter Terrorism and Counter Insurgency efforts and indeed our efforts in tackling the myriad of security challenges of the country and the sub-region.

With her current array of available and expected platforms, the NAF can confidently boast of a balanced tactical force within the subregion, that can effectively safeguard Nigeria's sovereignty, ensure her national security, and contribute to peacekeeping missions both regionally and globally. The NAF has also over the years achieved a lot in the area of Research and Development, with several landmark research projects.

**With Nigeria hosting the 3rd Africa Air Forces Forum, what are the objectives and anticipated outcomes you aspire to achieve through this esteemed gathering**

**of air forces from across the continent?**

Contemporary security challenges are not only multidimensional in nature, but mostly transnational. This presupposes the need for countries to partner and collaborate, while also comparing notes on the best approaches to addressing these challenges. It is noteworthy that the Africa Air Forces Forum serves as a regional platform for advancing air force capabilities and building pillars of bilateral and multilateral partnerships. To this end, the Forum provides a unique opportunity to highlight the continuous advancement of air force capabilities, technological innovations, and strategic developments that contribute to enhancing Africa's aerial defense and peacekeeping capabilities.

That is why we carefully selected the theme of our 60th Anniversary and the third Africa Air Forces Forum to be "Nigerian Air Force at 60: Leveraging Strategic Partnerships in Aerospace Innovations for Regional Security".





Special Operations Forces Personnel.

Beyond “Force Protection”, these crops of well-trained personnel also embarked on ground offensive to search, find and neutralize these criminals, by taking the war to them. The induction of new platforms such as helicopters, manned and unmanned surveillance platforms, UCAVs and ground attack platforms such as the Super Tucano aircraft have all been part of our overall adaptation strategy, in order to give the NAF the technological edge over the non-state actors.

Therefore, I am expectant that the Third Africa Air Forces Forum will emphasize on the importance of cooperation and collaboration between the Nigerian Air Force and air forces of other African nations, particularly in leveraging airpower capabilities to promote stability and, in a broader perspective, shaping the development of the NAF and other air forces on the continent.

defense systems/technologies that would provide bespoke solutions to Africa’s security challenges.

### In what manner has the Nigerian Air Force adapted to evolving security threats and challenges, particularly concerning counterterrorism and border security?

Hitherto, the NAF was largely trained and equipped to conduct conventional warfare and operations in the execution of its primary role of defending the territorial integrity of a united Nigeria from the air. However, events of the last decade or thereabouts of NAF’s involvement in asymmetric warfare had rather dictated the need for a change in approach to address the largely unconventional threats perpetrated by non-state actors.

In adapting to these threats, the NAF had to overhaul its training curricula to accommodate the tactics employed by these non state actors. The Service also focused on “Force Protection” of its troops and assets by increasing the training and employment NAF Regiment/

### Could you elaborate on the role of international cooperation and partnerships in augmenting the capabilities and efficacy of the Nigerian Air Force?

International cooperation and partnerships have contributed immensely to enhancing NAF’s capabilities and efficacy in the discharge of its mandate. This is largely because, as a very highly technical force, the NAF requires the partnership of technologically advanced countries and their resident OEMs and sometimes MROs to guarantee the prompt acquisition of platforms/systems/equipment as well as their subsequent in-depth maintenance.

This of course, does not exclude efforts for technology/capacity transfer, in which the NAF collaborates with them to also build these in-depth maintenance and overhaul capacities in-country. Furthermore, international cooperation and

## FEATURED

partnerships afford us the opportunity to conduct in-depth training for own personnel, particularly in the few areas, which we lack the requisite capacity and infrastructure to do so.

International cooperation and partnerships are equally required to expedite the process of spares acquisition from OEMs, in the short and medium terms, while we pursue long-term efforts to build capacities in that regard. In furtherance of these capacities-building efforts, the NAF leverages strategic partnerships in the utilization of cutting-edge technology through the prioritization of Research and Development towards developing a robust capacity to surmount current and emerging security challenges, while also enhancing its operational viability.

### How does the Nigerian Air Force prioritize innovation and technological progression to sustain its competitive edge in an ever-evolving security landscape?

In the area of innovation and technological development to sustain its competitive edge in the ever-evolving security landscape, the NAF has embarked on a robust R&D drive to keep pace with emerging technologies and their application in modern warfare. To this end, the NAF, through its Air Force Institute of Technology (AFIT) and Air Force Research and Development Centre (AFRDC), collaborates with strategic institutions in the areas of UAV, small arms and rockets development as well as RADAR development.

At the moment, we are partnering with some organizations to establish an Air Vehicle Development Centre. The several R&D initiatives are aimed at providing the NAF with the requisite technological edge to optimally operate and maintain the sophisticated platforms and equipment in its inventory.

### Could you please provide insight into the Nigerian Air Force’s initiatives and strategies regarding flight simulation and training?

We have several flight simulators for different aircraft types in our inventory. The employment of these simulators over the years has proved to be both operationally effective and efficient, as





the NAF has produced pilots who have proved themselves to be highly professional. Flight simulation has also been cost-saving and time-saving. Furthermore, the use of flight simulators has improved safety and enhanced professionalism.

**What steps and procurement strategies is the Nigerian Air Force implementing to adapt to the evolving landscape of aerial warfare and defense, particularly with the introduction of unmanned aerial systems (UAS) and other disruptive technologies?**

The NAF has recently reinvigorated its platform acquisition drive on account of increased commitments in combating internal security challenges and the need to maintain a balanced and modern air force that would be relevant in the contemporary and future aerial warfare and defense landscape.

Based on this, I set out my Command Philosophy to “Transform the NAF into an agile and resilient force that effectively meets the airpower demands of national security in all operational environments”. Achieving such agility and resilience also demands the right mix of platforms.

Accordingly, certain changes have been made in our platforms procurement strategies, drawing lessons from ongoing engagements and projecting into the future. The Service is inducting more UAS with precision strike capabilities to minimize collateral damages during internal security operations.

The induction of more attack and utility helicopters is another area where the NAF is looking to consolidate its efforts in order to meet the battlefield demands of the surface forces and also maintain a considerable agility and fighting edge over the insurgents.

In the area of Fighter Ground Attack platforms, the Service is considering fleet modernization to overhaul its ageing fleets for a more agile and potent air force. This is also followed by a decent investment into acquisition of requisite air defence assets and capabilities, necessary to secure our nation from the air. In order to sustain requisite resilient and keep up with the maintenance of the array of modern platforms being

inducted into the Service, we have made adequate arrangements to also mobilize the OEMs for prompt delivery of services to ensure a high level of aircraft/equipment serviceability in the NAF.

This is not excluding several other measures such as timely provision of requisite and critical spares and consumables, provision of up-to-date technical publications and ground support equipment.

Additional part of our strategy is to provide funds on a quarterly basis for consumables required for the maintenance of all NAF aircraft fleets. This is a departure from the previous method of “just in time” procedure for provision of spares and consumables.

**What initiatives are being implemented to ensure the well-being and professional advancement of NAF personnel, particularly regarding training and career development opportunities?**

Training is an area that the NAF considers very seriously, because it is our belief that any machine is only as good as the man behind it. To this end, we have embarked on a range of robust training initiatives in the NAF. This is underpinned by one of the key enablers of my command philosophy, which is “deliberate training and mission-oriented force development”. Already we have sustained the training of our personnel both locally and internationally.

At the moment, many personnel have either recently completed or are undergoing various training courses in-country. In terms of foreign training, hundreds of our personnel are attending a variety of courses abroad in countries such as the USA, Pakistan, Egypt, Czech Republic, China and the UK.

Apart from flying related courses, these individuals are also being trained in fields cutting across logistics, aircraft maintenance, safety and communications amongst others. As part of the initiative, we had made a request to foreign Defence Attachés in Nigeria for more training slots, particularly for pilot training, specialized and advanced maintenance training as well as continuous professional military training to bridge identified skills gaps in the

NAF. Another initiative is the complete overhaul of our Basic Military Training to focus on graduating high quality trained airmen and airwomen. We have begun a holistic assessment and review of the course curriculum, training facilities and infrastructure to identify and address gaps in all training institutions.

**In what ways does the Nigerian Air Force contribute to broader initiatives aimed at fostering regional cooperation and collective security across Africa?**

The Nigerian Air Force has contributed to regional cooperation initiatives under the auspices of organizations such as the UN, AU and the ECOWAS.

Through its numerous deployments, the NAF has contributed to the furtherance of the Nigerian Government’s commitments and willingness to combat national and regional threats to peace and security in Nigeria, West Africa, Gulf of Guinea and the entire African continent. The NAF is also cooperating with her neighbours in the conduct of ongoing counter terrorism and counter insurgency operations. We are doing this as part of the Nigerian contingent through the Multi National Joint Task Force.

**How important is the 3rd Africa Air Forces Forum as a platform to gather the chiefs of the defense community worldwide under one roof.**

The African Air Forces Forum is a regional platform for advancing air force capabilities and building pillars of bilateral and multilateral partnerships amongst the air forces of Africa. Through the symposia, exhibition and discussions, ideas would be mutually shared, with the ultimate aim of enhancing Africa’s aerial defense and security capabilities.

This year’s theme, “Nigerian Air Force at 60: Leveraging Strategic Partnerships in Aerospace Innovations for Regional Security” was painstakingly chosen to reflect our collective efforts in securing our respective countries and by extension, the African Continent. Forging purposeful partnerships based on shared values and interests is absolutely at the core of peace and stability in our Continent.





AFRICA'S PREMIER EXHIBITION OF  
LAND AIR AND SEA TECHNOLOGIES



**AFRICA**  
AEROSPACE & DEFENCE  
18-22 SEPT 2024

BOOK YOUR SPACE NOW  
**#AAD2024**

THE LARGEST GATHERING OF DECISION MAKERS  
AND BUYERS ON THE AFRICAN CONTINENT

**18 - 22 SEPT**

**AIR FORCE BASE WATERKLOOF  
CITY OF TSHWANE | SOUTH AFRICA**

[WWW.AADEXPO.CO.ZA](http://WWW.AADEXPO.CO.ZA)

PARTNERS:



SUPPORTED BY:



## AIRCRAFT MODERNIZATION: A Look at the Nigerian Air Force's Fleet Upgrades

The Nigerian Air Force (NAF), the air branch of the Nigerian Armed Forces, has embarked on a significant modernization program to enhance its operational capabilities.

The Nigerian Air Force Soars to New Heights: Modernization and Fleet Expansion  
In the skies of Africa's most populous nation, a transformation is underway. The Nigerian Air Force (NAF), a key component of the nation's defense architecture, is undergoing a significant modernization process. This article delves into the NAF's strategic efforts to upgrade its fleet, focusing on the acquisition of new aircraft and the phasing out of older models.

Historically, the NAF's fleet has comprised various aircraft models acquired over several decades. Aging aircraft and changing security dynamics have necessitated a modernization program to replace older models with more advanced and versatile platforms. The NAF's modernization strategy includes the acquisition of new aircraft to bolster its combat, reconnaissance, and transport capabilities.



### A Fleet in Transition

The NAF's journey toward modernization is marked by the induction of a range of state-of-the-art aircraft, each selected to fulfill specific roles within the force's expanding operational spectrum. From advanced multirole fighter jets to agile attack helicopters and sophisticated unmanned aerial vehicles (UAVs), the NAF's arsenal is evolving to meet the demands of contemporary security challenges.

### Strengthening Air Combat Capabilities

At the forefront of the NAF's new acquisitions are three CAC/PAC JF-17 Thunder multirole fighter jets. These aircraft represent a leap forward in

the NAF's air-to-air and air-to-ground combat capabilities, boasting advanced avionics and weaponry that enable them to engage a variety of targets effectively. The JF-17 is a supersonic air superiority fighter designed to counter enemy aircrafts, with secondary air to ground capabilities.

### Training for the Future

While the NAF has a balanced fleet of aircrafts providing different capabilities for different situations, the M-346FA will be the backbone of the NAF in terms of sheer numbers. Two complete Squadrons. First batch will be arriving in a couple of months. The NAF is acquiring the M-346 FA for Close Air Support, specifically





is subsonic, optimized for flying at low altitudes, allowing it to operate in close proximity to ground forces.

The addition of 24 Leonardo M-346 light combat and trainer aircraft underscores the NAF's commitment to developing a highly skilled pilot cadre. These platforms serve a dual purpose: preparing pilots for the rigors of modern aerial combat while also being capable of undertaking light attack missions. This Italian-made aircraft is known for its agility and advanced training capabilities.

#### **Precision and Persistence**

The procurement of 12 SNC A-29B Super Tucano aircraft enhances the NAF's precision strike capabilities, particularly in counterinsurgency and close air support roles. These aircraft are renowned for their ruggedness and ability to operate from austere environments, making them well-suited for the

diverse terrains of Nigeria. It is suitable for counter-insurgency and close air support (CAS) operations. For CAS/ground attack the NAF fields a Squadron (twelve) of A-29 Tucanos with a mix of Alpha jets and L-39 ZAs constituting another Squadron. These aircrafts are equipped for low intensity conflicts such as insurgencies or basic air defence against similarly equipped adversaries.

#### **Eyes in the Sky**

The NAF has been investing in a diverse array of ISR platforms to provide a comprehensive surveillance envelope for the military. Intelligence, surveillance, and reconnaissance (ISR) are critical components of modern warfare. To this end, the NAF has acquired two Beechcraft Super King Air ISR aircraft, which are equipped with sophisticated sensors to provide real-time intelligence that can shape the battlefield. The NAF also fields a large number of Austrian-made Dia-

mond DA62 and DA42 ISR-capable aircraft, enhancing its surveillance and reconnaissance capabilities.

#### **Expanding Tactical Reach**

The NAF's logistical and tactical reach has been extended with the acquisition of two EADS CASA C-295 tactical transport aircraft. To improve its tactical airlift capacity, the NAF has acquired the C-295, a versatile transport aircraft capable of operating in challenging environments. These workhorses of the sky are capable of transporting troops and equipment swiftly, ensuring that the NAF can respond rapidly to emerging situations.

#### **Helicopter Powerhouse**

The NAF's rotary-wing capabilities have received a significant boost with the induction of 18 Mil Mi-35, 6 TAI/AgustaWestland T-129, and 12 Bell AH-1Z Viper attack helicopters. These platforms bring formidable firepower and enhanced mobil-

“The Nigerian Air Force's modernization efforts are a testament to its resolve to maintain aerial dominance and provide robust national defence.”

ity to the NAF's operations, allowing for greater flexibility in a variety of combat scenarios. The fleet has been strengthened with these attack helicopters, offering robust firepower and multi-mission capabilities. The modern T-129 provides enhanced precision strike and reconnaissance features, while the advanced AH-1Z offers cutting-edge avionics and weapons systems.

#### **Unmanned Advantage**

In an era where UAVs are reshaping the dynamics of conflict, the NAF has not been left behind. The acquisition of 2 CAIG Wing Loong II MALE combat drones, 6 Bayraktar TB2 combat drones, and 10 Songar combat VTOL drones represents a significant investment in unmanned capabilities, providing the NAF with extended reach and persistent surveillance options. The Wing Loong II MALE combat drones, expands NAF's unmanned capabilities for long-endurance missions, While the Turkish-made Bayraktar TB2 are known for their effectiveness in intelligence and strike operations. Also, the Songar combat VTOL drones further enhances the NAF's unmanned operational flexibility and ground support.

#### **Maintaining Aerial Dominance**

The Nigerian Air Force's modernization efforts are a testament to its resolve to maintain aerial dominance and provide robust national defence. As these new aircraft are integrated into the NAF's operational framework, they promise to enhance Nigeria's ability to safeguard its

sovereignty and contribute to regional stability. The skies over Nigeria are witnessing the dawn of a new era, one where the NAF flies higher, faster, and stronger than ever before.

The modernization of the Nigerian Air Force (NAF) is poised to significantly enhance Nigeria's defense posture in several ways:

1. **Deterrence Capability**
2. **Force Projection**
3. **Counterinsurgency Operations**
4. **Training and Readiness**

The modernization brings with it a technological edge, as newer aircraft come equipped with advanced avionics, sensors, and weapon systems. This will likely increase the NAF's operational efficiency and effectiveness in both defensive and offensive missions.

By diversifying its fleet with aircraft from different countries, Nigeria may gain more strategic autonomy and flexibility in its defense procurement and operations. This could reduce dependency on any single foreign entity for military hardware.

#### **Gearing up to meet future threats**

Although, the fleet modernization is expected to provide the Nigerian Air Force with a qualitative leap in capabilities, enabling it to better safeguard national sovereignty, contribute to regional security, and address contemporary security challenges more effectively. However, the NAF faces a reckoning in the coming years.

The service will have to decide what kind of air force it wants to be and acquire the aircrafts to match that purpose. Some argue the NAF should tailor itself strictly for low intensity operations against non-state actors. Others want the NAF to gradually optimize itself for high intensity warfare against a technological advanced foe. At current spending level can the NAF afford to pay for an Airforce that does both?

According to defence and security expert Boboye Adeolu, he explained that “At a time of serious global geopolitical upheaval, Nigeria cannot afford to stand still. Seismic events currently happening much further away will ultimately resonate in our West African corner of the globe, evidence of this is already emerging in the unfor-



tunate civil war in Sudan.”

He opined that “Nigeria cannot afford complacency at this time and must continue to modernize both in platforms and in doctrine. The recent acquisitions by the Nigerian Airforce are a strategic proactive step in this direction. They should be applauded and we hope to see more. We hopefully can look forward to a time Nigeria takes its rightful place as the regional power it should be in West Africa.”

The NAF for over a decade has leaned on just about 10 F-7N's (and later 3 JF-17s) for the most dangerous missions. Given current security imperatives and volatile geopolitical landscape the NAF should possess around 20 to 40 more fighters for strategic air defence. The NAF will either have to augment its fighter fleet or accept a huge reduction in strategic air power with profound implications for Nigeria's ability to defend itself against a near peer adversary and project power across the region if/when needed.

The NAF don't have them in numbers that allow for attrition. The F-7Ni Airguard, even with recent upgrades lack the capacity to penetrate modern air defence without unsustainable losses. Yet it remains one of the most capable fighter jets available to Nigeria for operations in contested airspace.

It is recommended that the NAF should buy more multirole fighters to preserve it's high-in-

tensity peer to peer combat capabilities.

We understand the air force is the most capital-intensive branch of the military. It's not for no reason that the NAF ordered only 3 of the 18 JF-17 fighters it originally claimed it needed.

An ambition to sustain all current NAF fleet and purchase significant numbers of JF-17s beyond the initial three or acquire a replacement fleet for the F-7Ni fighters is not matched by available funding.

So, while the NAF's fleet of COIN aircrafts for low intensity conflicts is one of the most impressive in Africa, from state-of-the-art A-29s to a fleet of armed attack drones. The conventional aspect of air power is where the government will have to make some hard decisions.

The modernized fleet today and future procurement will likely reshape Nigeria's defence strategy, making it more resilient and responsive to the dynamics of modern warfare and peace-keeping efforts.


The Nigerian Air Force's modernization efforts represent a significant step forward in enhancing its defensive and offensive capabilities. The new acquisitions, coupled with the retirement of legacy aircraft, position the NAF to better address contemporary security challenges and contribute to regional stability now and in the foreseeable future.

- Position Your Brand as a Defence Leader
- Introduce New Products to the Market
- Reach Decision-makers in the Military


**ADVERTISE WITH US**

**START WITH \$300**

**30% OFF**

 [Business@Military.africa](mailto:Business@Military.africa)

 +234 810 3689898

 [www.military.africa/advertise](http://www.military.africa/advertise)







## THE FUTURE OF FLIGHT: Unmanned Aerial Vehicles in the Nigerian Air Force

**The impact of UAVs on modern warfare cannot be overstated. They offer the NAF a significant tactical advantage, allowing for real-time data collection without putting pilots at risk. The ability to conduct covert reconnaissance and precision strikes has been a game-changer in the fight against insurgencies.**

In the ever-evolving theater of war, one technology has risen above the rest to redefine the rules of engagement: drones. These unmanned aerial vehicles (UAVs) have transitioned from mere surveillance apparatuses to sophisticated platforms capable of altering the strategic and tactical dynamics of conflicts worldwide.

The inception of drones in military operations was modest, primarily focused on reconnaissance and intelligence gathering. However, the turn of the century marked a significant shift with the introduction

of armed drones, such as the MQ-1 Predator, which became the emblematic weapon of counter-insurgency campaigns by the United States.

From the sands of Libya, to the Azerbaijani desert, and then to the black muddy Ukrainian battlefield, and even the Sudanese Savanna. Today, drones are not just tools of superpowers but have democratized warfare, enabling even non-state actors to deploy them for various purposes. The combat drone, once the preserve of military superpowers, is now changing the nature of battle across the globe.

In the ever-evolving theater of war, one technology has risen above the rest to redefine the rules of engagement: drones. These unmanned aerial vehicles (UAVs) have transitioned from mere surveillance apparatuses to sophisticated platforms capable of altering the strategic and tactical dynamics of conflicts worldwide.

The inception of drones in military operations was modest, primarily focused on reconnaissance and intelligence gathering. However, the turn of the century marked a significant shift with the introduction of armed drones, such as the MQ-1 Predator, which became the emblematic weapon of counter-insurgency campaigns by the United States.

From the sands of Libya, to the Azerbaijani desert, and then to the black muddy Ukrainian battlefield, and even the Sudanese Savanna. Today, drones are not just tools of superpow-

ers but have democratized warfare, enabling even non-state actors to deploy them for various purposes. The combat drone, once the preserve of military superpowers, is now changing the nature of battle across the globe. From precision targeted strikes to providing real-time battlefield intelligence, drones have become a staple in modern arsenals.

The Nigerian Air Force (NAF) has been at the forefront of incorporating Unmanned Aerial Vehicles (UAVs), also known as drones, into its military operations. This strategic move is not only revolutionizing the NAF's capabilities but also altering the landscape of modern warfare within the region.

Autonomous drones, in particular, have revolutionized military strategy. Capable of executing complex missions with minimal human oversight, these drones have introduced a new level of efficiency and lethality to mil-

itary operations.

In late 2020 it was reported that Nigeria would soon be receiving two Wing Loong IIs, four CH-4Bs and two additional CH-3As unmanned aerial combat vehicles (UCAVs) from China, the latter presumably to replace the examples lost in service since the type first entered service in 2014. Arguably more surprisingly was the sighting of a single Emirati Yabhon Flash-20 in Nigeria in February 2021. The type was first reported to have been ordered by Nigeria in 2016, but had previously not been sighted in Nigerian service.

After initially shopping in China for UCAVs, Nigeria turned to Türkiye for the acquisition of the Bayraktar TB2 UCAV and the Songar armed VTOL UAV in 2022.

The strategic impact is profound, as drones can now engage targets with precision, reduce collateral damage, and





**IF THERE WERE NO FLANKERS,  
FULCRUMS, FIGHTING FALCONS,  
GRIPENS, RAFALES, STRIKE EAGLES,  
SUPER HORNETS, YOU WOULDN'T  
NEED THE JF-17  
THUNDER.**



**But these threats do exist,  
and the JF-17 is the only  
aircraft that can effectively  
counter them... and survive.**



provide persistent surveillance without risking human lives.

**The Deployment of UAVs in the NAF**

The NAF's engagement with UAVs began with the need for enhanced intelligence, surveillance, and reconnaissance (ISR) to tackle security challenges posed by terrorists, bandits, and armed militants.

The introduction of UAVs like the Amebo and the Gulma, based on the design of the Israeli-supplied Aerostar, marked Nigeria's entry into the realm of indigenous drone technology. In recent years, the NAF has expanded its UAV fleet with the acquisition of models such as the Tsaigumi, Nigeria's first indigenous operational UAV, developed in collaboration with UAVision.

The Tsaigumi is designed to provide day and night ISR support for counter-terrorism operations and other missions, including patrolling the exclusive economic zone (EEZ), search-and-rescue (SAR), and environmental monitoring. A significant leap came in 2014 with the acquisition of the first CH-3A UAVs from China. These armed tactical drones marked the NAF's entry into offensive drone warfare,

providing a vital tool in the fight against Boko Haram and ISWAP.

The NAF's UAV arsenal has since diversified. Since the 1980s, according to our Drone Procurement Dataset, we have tracked about 195 drone units of different types and class that Nigeria has acquired. This includes 132 fixed-wing drones, 38 Vertical Take-Off and Landing (VTOL) Fixed-Wing drones, and 27 Rotary-wing drones.

**Impact on Modern Warfare**

The impact of UAVs on modern warfare cannot be overstated. They offer the NAF a significant tactical advantage, allowing for real-time data collection without putting pilots at risk. The ability to conduct covert reconnaissance and

precision strikes has been a game-changer in the fight against insurgencies.

Moreover, the NAF's UAV pilot training capability, based at the 401st Flying Training School in Kaduna, ensures that Nigeria is not only a consumer of drone technology but also a producer of skilled UAV operators.

The NAF's fleet of UAVs has also expanded with the acquisition of the high-end Wing Loong II medium-altitude long-endurance (MALE) unmanned aerial vehicles from China. These UAVs can remain airborne for up to 31 hours in intelligence, surveillance, and reconnaissance mode and 26 hours in offensive role, adding significant value to counter-insurgency and anti-banditry operations.

The impact of UAVs on the NAF's operations is profound. They provide enhanced ISR data, both during the day and at night, enabling the NAF to better understand and respond to threats. This is particularly crucial in Nigeria's fight against terrorism and banditry, where intelligence is key to success-





### Challenges and Future Prospects

Despite the clear advantages, the deployment of UAVs comes with its own set of challenges. These include technological limitations, maintenance issues, and the need for constant upgrades to keep up with global standards. Also, issues such as interoperability, capability gaps, and countermeasures against enemy drones are areas that require ongoing attention.



Additionally, the proliferation of drone technology means that near-peer adversaries may also employ similar tactics, necessitating the development of counter-UAV strategies. Moreover, the proliferation of drone technology has led to an arms race of sorts in Africa, with nations striving to maintain superiority in this domain.

Looking ahead, the NAF is poised to further integrate UAVs into its operations. With plans to acquire more advanced models, the future of UAVs in the Nigerian Air Force looks promising. These acquisitions, coupled with ongoing local development efforts, signal a commitment to maintaining a cutting-edge aerial warfare capability.

According to defence expert Zion Joshua, he noted that “the recent acquisition of Unmanned Aerial Vehicles (UAVs) by the Nigerian Air Force will significantly enhance its capabilities, by enabling it to carry out its duties more effectively especially in real-time intelligence, surveillance, and re-

connaissance (ISR) gathering, conducting precision strikes, supporting our able ground troop in their effort against counter-terrorism and counter-insurgency operations, providing critical ISR for logistics and land convoy.

“As you can see in the present global conflict like Russia-Ukraine war where UAV has set its doctrine of quick detection and quick reaction, which has given strategic results.”

“I hope the Nigeria Air Force will continue with the procurement UAV platform and also development of indigenous UAV platforms in line with the modernization of the Air Force doctrine and strategic acquisition of UAV which will be game changer in detection and elimination of national threat.”

### Conclusion

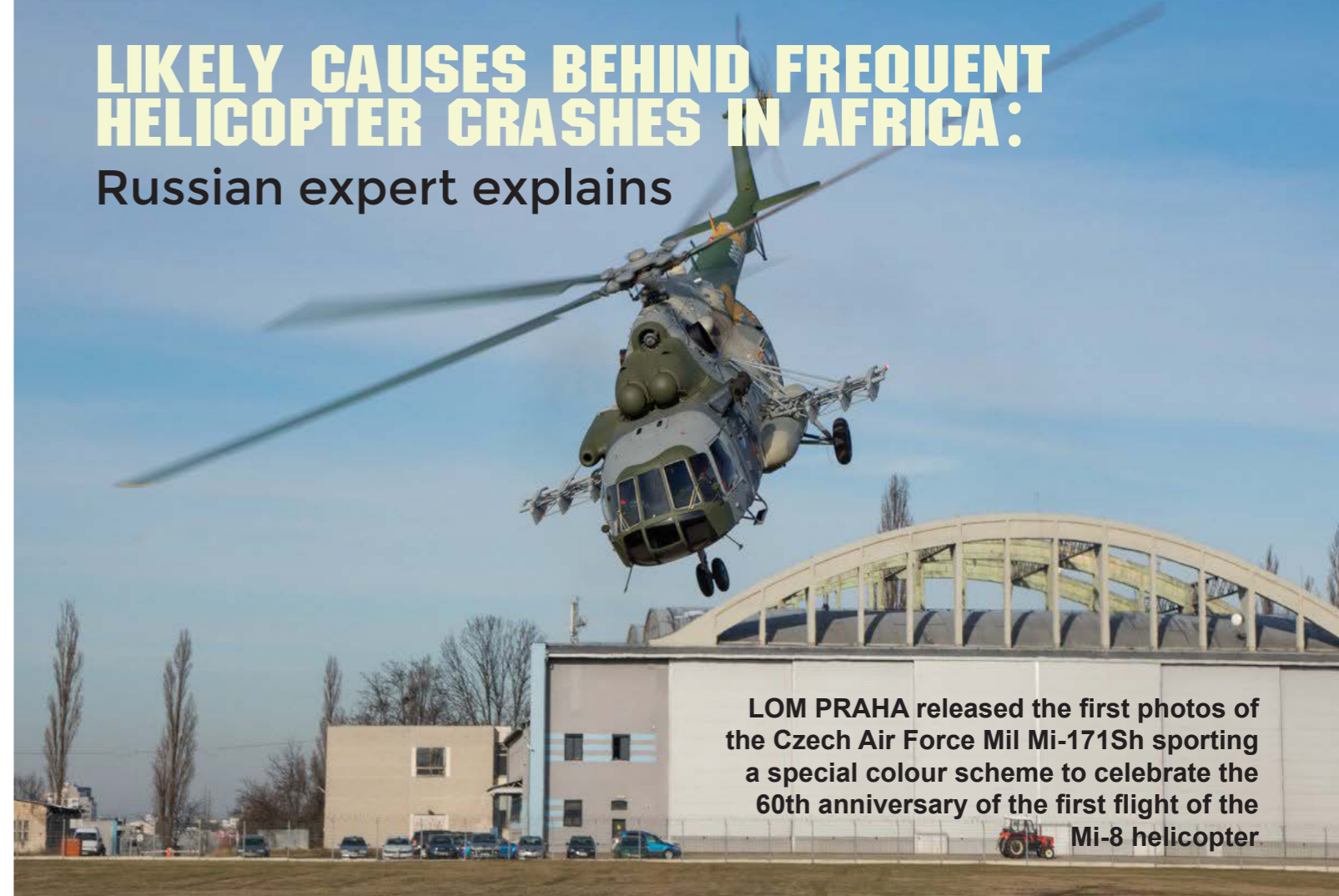
The NAF's investment in UAV technology is a testament to the critical role these systems play in modern warfare. As the NAF continues to evolve its UAV capabilities, it not only enhances its operational effec-

tiveness but also contributes to the broader discourse on the future of military aviation. As technology advances, we can expect to see even more sophisticated UAVs in the NAF's fleet, capable of performing a wider range of missions. The landscape of modern warfare is undeniably being reshaped by drones. They have introduced a new dimension to conflict, one where the skies are as contested as the land and sea. As technology advances, so too will the capabilities of these remarkable machines, continuing to change the face of warfare as we know it.

In conclusion, the deployment of UAVs in the Nigerian Air Force represents a significant step forward in the country's military capabilities. These machines are not only changing the way the NAF conducts its operations but are also contributing to the fight against insecurity in Nigeria. As the NAF continues to invest in UAV technology, we can expect to see even more innovative applications in the future.

## LIKELY CAUSES BEHIND FREQUENT HELICOPTER CRASHES IN AFRICA:

Russian expert explains



LOM PRAHA released the first photos of the Czech Air Force Mil Mi-171Sh sporting a special colour scheme to celebrate the 60th anniversary of the first flight of the Mi-8 helicopter

### Unauthorized MRO, Subpar Parts, and Training Gaps: The Potential Culprits Behind Africa's Helicopter Crashes

“The frequent helicopter crashes in Africa cannot be solely blamed on the helicopters themselves.”

Helicopter crashes are not uncommon in Africa, with some of them causing tragic loss of life. A large part of helicopters used in various African militaries are Russian-made.

According to open data from the Russian Helicopters holding company (late 2019), more than 900 helicopters made in Russia and the USSR are registered in African countries. When it comes to military equipment, the share of Russian helicopters reaches about 40%.

Russian-made helicopters have indeed made significant inroads on the African continent. The most prevalent Russian-made helicopters in Africa belong to the world-famous Mi-8/17 and Mi-24/35 helicopter family, with various modifications. Over 250 of them are Mi-24/35 helicopters.

These helicopters have demonstrated high reliability, survivability, and combat effectiveness in specific African conditions while being used by the Armed Forces of dozens of countries on the continent.



## AEROSPACE

While praised for their reliability and effectiveness, these choppers have also been involved in several unfortunate crashes. While some media attributes these incidents to the helicopters' Russian origin, industry professionals point to other factors: unauthorized maintenance, low-quality spare parts, and inadequate pilot training.

First, it is likely, that insufficient attention or resources is given by the operators to general operational safety issues, while a helicopter fleet's maintenance and operation requires a systematic approach.

**The MRO Maze:** A crucial aspect highlighted by experts is the use of unauthorized third-party companies for maintenance and repair. These companies often lack official technical documentation and expertise, raising concerns about safety standards. While Russia offers official MRO contracts after the warranty expires, operators sometimes opt for cheaper, unauthorized alternatives, compromising equipment integrity and putting lives at risk.

At the same time, when delivering helicopters, after the warranty period has expired, Russia always offers to conclude official contracts for MRO, but the customer often chooses a different path, jeopardizing the safety of the equipment and the lives of crews and passengers.

**A Matter of Parts:** Counterfeit, low-quality, or second-hand parts used in repairs further exacerbate the problem. A 2018 incident involving

a Mi-17-1V helicopter crash in Senegal, attributed to poor-quality repairs in Ukraine, serves as a stark example.

**Training Gaps:** Pilot error also plays a role in some crashes. Apparently, a number of African countries neglect to organize the further training of helicopter pilots and engineers after completing basic training in Russia. While African operators receive basic training in Russia, subsequent comprehensive training is sometimes entrusted to private contractors with questionable qualifications and experience from third countries (retired military personnel).

This, coupled with potential lengthy gaps in flight operations and inadequate retraining for different helicopter types, can create a recipe for disaster. It is not clear whether technical training equipment is purchased or used. One the other hand, helicopters flying with the United Nation do not suffer frequent crashes incidents since they follow stringent MRO requirements. Their adherence to Approved Maintenance Organisation (AMO) standards ensures quality maintenance practices.

The frequent helicopter crashes in Africa cannot be solely blamed on the helicopters themselves. Unauthorized MRO practices, substandard parts, and inadequate pilot training likely play a significant role. By adopting stricter maintenance procedures, using genuine parts, and investing in proper pilot training, African operators can improve safety and ensure the continued effectiveness of their helicopter fleets.



Senegal air force two of three overhauled Mil Mi-24V attack helicopters from Poland's WZL-1 military aviation works in Lodz on 30 November

EGYPT  
INTERNATIONAL  
AIRSHOW | 3-5  
SEPT  
2024

El Alamein International Airport

DEFENCE | SPACE | COMMERCIAL

# THE GATEWAY TO AEROSPACE IN AFRICA & THE MIDDLE EAST

3-5 September 2024

El Alamein  
International Airport

DISCUSS YOUR PARTICIPATION:  
sales@arabianworldevents.com

Platinum Sponsor  
**MBDA**

Gold Sponsor  
**NORTHROP  
GRUMMAN**

Bronze Sponsor  
**ARDO**  
Aeroprogramm

Media Partner  
**MILITARY  
AFRICA**

Supported by  
**Egypt Air Force**

Supported by  
**Egyptian Space Agency**

Supported by  
**Ministry of Defence**

Supported by  
**Official Carrier**  
**EGYPTAIR**  
A STAR ALLIANCE MEMBER

[LinkedIn](#) [Twitter](#) [Instagram](#) [Facebook](#)  
@egyptairshow  
www.egypt-air-show.com

Organised by  
**Arabian World Events**





# MISSION-READY:

## The Role of the Nigerian Air Force in Counter-Terrorism Operations

**AIR POWER IS A CRITICAL TOOL IN STOPPING TERRORISM.**

“Nigerian Air Force airstrikes in the North East have devastated and coerced the insurgents by limiting their freedom of action to operate openly and en masse, as was the case before,”

On Friday, September 1, 2017, Boko Haram extremists took a break from their warfare to observe a holiday. Hundreds of the fighters gathered under trees in the Sambisa Forest in Borno State, northeast Nigeria. Nigerian surveillance spotted them, and then the Nigerian Air Force (NAF) dispatched fighter jets.

An Alpha Jet began the attack with bombs, “neutralizing” hundreds of the fighters, said a report published in Nigeria’s Daily Post. A second jet followed with a bomb attack, and a third fighter used rockets to strafe fleeing insurgents. “After the attacks, a few Boko Haram survivors were seen scampering from the location,” the newspaper reported. Only days

before the raid, the chief of the air staff, Air Marshal Sadique Abubakar, told troops at the NAF base in Yola that global experience “has shown that air power is critical to the defeat of asymmetric warfare such as the Boko Haram insurgency.”

“All hands must therefore be on deck to ensure the effective projection of air power to complete the defeat of the Boko Haram challenge,” he said. Nigeria’s Air Force has its hands full. Boko Haram began in northern Nigeria, but it also has roamed parts of neighboring Burkina Faso, Cameroon, Chad and Niger. Of the countries in the region, Nigeria is, by far, the most formidable air power.

When the Nigerian Air Force cannot undertake its mandates

due to limited aerial capability, the counter-terrorism efforts cannot be sustained. The military echelon will find it difficult to perform optimally, for instance, the NAF’s various Intelligence, Surveillance, and Reconnaissance (ISR) platforms are critical in providing valuable information on the enemy’s disposition, troops strength and composition.

The NAF’s strike and attack aerial apparatus are seen as the Nigerian Military’s de facto ‘far-reach’ capability; first to see the enemy, first to strike the enemy and first to report the enemy’s position. The Nigerian Air Force is simply the fulcrum that ties all the components involved in fighting the war, its role cannot be over-emphasized.

According to globalfirepower.com, Nigeria’s Air Force is the largest in the region. Its air fleet is about the size of the combined fleets of neighboring Cameroon, Chad and Niger.

Nigeria’s total fleet is estimated to be about 110 aircraft, including fighters, transport planes, helicopters and trainers. Such figures are seldom exact since aircraft go in and out of service

for extended periods or are even retired without it being noted. Obsolete or retired aircraft are indicative of the struggle to maintain air fleets across the continent. Abubakar has

**The Nigerian Air Force is simply the fulcrum that ties all the components involved in fighting the war, its role cannot be over-emphasized.**

stressed that the NAF is improving aircraft and equipment maintenance, allowing it to fly more than 9,000 hours in 2015 and 2016 in counterinsurgency operations.



“When the Nigerian Air Force cannot undertake its mandates due to limited aerial capability, the counter-terrorism efforts cannot be sustained.”

NAF appears to have adopted a “make the best of what we have” philosophy, keeping costs down and buying smaller attack planes that are more adaptable to asymmetric conflicts. And they have had some successes in bringing retired equipment back into service.

In 2016, the Air Force reconfigured two Alpha Jets in its inventory that had been acquired without weapons capability. The two jets were among four bought from the United States in 2015. The four jets were purchased specifically to combat Boko Haram. Until the weaponry fitting, the jets had been limited to pilot training.

The Air Force had been looking to get the jets reconfigured overseas, but the manufacturer had long since closed down





the production line. Eventually, Nigerian engineers proposed ways to do the work in Nigeria. Bright Mountain Media says the adaptations cost about \$13,000. Some reports listed a cost as low as \$2,000. “Given typical military equipment costs, this stands as a remarkable achievement,” Bright Mountain reported. “Foreign companies had requested up to \$30,000 just to assess the cost of doing the refit.”

In February 2017, the Air Force announced that it was getting three Embraer Super Tucano turboprop planes from the Brazilian Air Force. The small, highly maneuverable planes are particularly suited for counterinsurgency operations and precision guided-munitions runs. In August 2017, the United States approved the \$593 million sale of 12 additional Super Tucanos to Nigeria.

In April 2017, the Air Force commissioned two Mil Mi-35M attack helicopters to boost counterinsurgency efforts, Jane’s reported. The Air Force had ordered 12 of the Russian aircraft, which can be modified for attacks, ground assaults on

armored targets, medical

In July 2017, the Air Force announced it was expanding its training to meet the demands of its expanded mission and air fleet. Part of the expansion was the result of reactivating some of its aircraft.

#### STAMPING OUT BOKO HARAM

As of the end of 2017, Boko Haram was faltering and had splintered into two groups. Air Marshal Abubakar said in a college lecture in September 2017 that the Nigerian Air Force had wiped out some of Boko Haram’s top leaders and several of the terrorist group’s logistics bases.

“Nigerian Air Force airstrikes in the North East have devastated and coerced the insurgents by limiting their freedom of action to operate openly and en masse, as was the case before,” he said. “Equally, these punitive strikes have eradicated the insurgents’ ‘front-line’ leadership and logistics bases, thereby reducing their operational capability.”

He added that “equipping and

sustaining a balanced air force” is one of the greatest challenges facing Nigeria. “Given the current precarious situation Nigeria operates in and the rampant cases of conflicts, the Armed Forces must prepare for the conduct of war and secure military victories until peace is restored politically,” he said. “Indeed, the warfighting mission of an armed force will determine how it is organized, equipped and trained.”

Nigeria’s Alpha Jets were largely abandoned for years, until the Air Force began returning them to service in 2013 to fight Boko Haram. Of the original 24, an estimated 13 were returned to service.

An incident in June 2016 shows how effective they can be. The Multinational Joint Task Force had recently chased Boko Haram fighters out of camps in the Sambisa Forest. Insurgents armed seven trucks — two with heavy machine guns — and waited to ambush opposing forces near Daira Noro in Borno State. As the Boko Haram fighters prepared their attack, an unarmed civilian plane flew over — and radioed the insurgents’ position to a pilot in a nearby Alpha Jet.

As Bright Mountain Media reported, “The Alpha Jet unleashed a barrage of rockets on the concealed ambush, followed by 250-pound bombs and strafing runs.”

All of the trucks were destroyed. Nigerian troops arrived and chased off the survivors. The troops found 15 bodies and two abandoned rocket-propelled grenades.

KC-390 MILLENNIUM

# MISSION ACCOMPLISHED

AFTER AN EXTENSIVE TEST CAMPAIGN THE KC-390 MILLENNIUM IS CERTIFIED FOR FULL OPERATIONS.

From the outset, the KC-390 Millennium was designed to set a new benchmark in the medium-size military transporter segment. Developed with support from the Brazilian Air Force (FAB) and Brazilian Government, the largest and most complex aircraft ever built in the southern hemisphere has gone through a rigorous and challenging testing program, including 3,500 prototype flight test hours and close to 85,000 hours of lab tests. In March 2023, it received the coveted Full Operational Capability certification from the Brazilian Military Certification Authority (IFI – Institute of Industrial Development and Coordination), with the platform meeting or exceeding all requirements. This seal of approval, which is extremely difficult to attain, confirms the KC-390 Millennium is ready for full operational duties in all missions and showcases to the world its class-leading reliability, flexibility and performance.

#C390UnbeatableCombination  
[c390foc.com/en/](https://c390foc.com/en/)



EMBRAER

CHALLENGE.  
CREATE.  
OUTPERFORM.



# REDEFINING WARFARE: THE RISE OF HAVELSAN'S DIGITAL TROOPS



## Partner Content

In the evolving landscape of modern warfare, the integration of autonomous and robotic systems on the battlefield has become a game-changer. These systems, known as force multipliers, significantly enhance the combat power and strategic outcomes for military forces. HAVELSAN, a leading defense technology company, has been at the forefront of this revolution with its vision of Digital Troops.

### Digital Troops: A New Defense Paradigm

Digital Troops is HAVELSAN's concept of a unified force comprising various unmanned aerial, land, and sea vehicles. This vision is set to redefine defense strategies by introducing unmanned battlefields where autonomous systems collaborate seamlessly. The goal is to develop systems capable of autonomous task execution, intercommunication, strategic planning, and real-time mission implementation.

### Technological Vanguard

HAVELSAN's arsenal includes advanced systems like the BARKAN Autonomous Medium-Class Unmanned Ground Vehicle, the B30 Under the Cloud Autonomous Aircraft, and the M6 Advanced Micro-Reconnaissance UAV System. These systems are part of the Super Intelligence System, which orchestrates the Digital Troops, enhancing battlefield command and control.

### The Command Center's New Eye

The Digital Troops concept envisions a future where soldiers and robots coexist on the battlefield. Command centers will benefit from enhanced decision-making capabilities, thanks to real-time data from



Barkan Unmanned Ground Vehicle.  
(Credit Havelsan)



Digital Troops. This integrated approach promises to increase the success rate of military units and shape the future of warfare.

### Superintelligence System: The Brain Behind the Brawn

The Superintelligence System is a sophisticated AI and intelligence platform designed to optimize military efficiency in digitalized battlefields. It serves as a mobile analysis system, particularly for Autonomous Land and Air Systems, boosting mission effectiveness through high-level data processing and analysis.

### BARKAN, B30, and M6: The Frontline Innovators

The BARKAN UGV, with its autonomous capabilities and modular design, is versatile for various missions, including logistics, protection, and reconnaissance. The B30 UAV excels in joint operations with its vertical take-off and landing, autonomous mission execution, and payload flexibility. The M6 UAV, an ultra-portable reconnaissance system, meets the demands of modern warfare with its ability to operate in swarms and perform autonomous tasks.

### The Battlefield Benefits

Digital Troops offer numerous advantages:

**Increased Safety:** By minimizing frontline exposure, Digital Troops safeguard soldiers, reduc-

ing casualties from direct combat, landmines, and other dangers.

**Efficiency and Cost-Effectiveness:** Unmanned systems operate longer without human needs, cutting down on supply and personnel expenses.

**Enhanced Capabilities:** Digital Troops possess unique abilities, such as high-altitude swarm operations and versatile payload options for reconnaissance and support.

**Precision and Accuracy:** With advanced guidance systems, Digital Troops execute operations with remarkable precision, improving target engagement.

**Reduced Human Error:** Autonomy in navigation and operation mitigates the risks associated with human mistakes.

### Conclusion

HAVELSAN's Digital Troops are setting the stage for a transformative era in military operations. With their promise of increased safety, efficiency, versatility, precision, and reduced human error, these systems are poised to become a pivotal factor in the future of warfare. As technology advances, the role and capabilities of Digital Troops will only grow, solidifying their position as an essential component of modern military strategy.



# MILKOR 380:

## The largest armed UAV built in Africa takes flight

Milkor is positioned to cater to the burgeoning global interest in UAV procurement.

**M**ilkor has achieved a significant milestone with the inaugural flight of its Milkor 380 unmanned aerial vehicle (UAV), representing a substantial step forward in the development of its flagship aircraft, which stands as the largest armed UAV originating from Africa. This historic flight, which took place on the 19th of September, positions South Africa among a select group of nations globally that have successfully conceived and operated a UAV of such impressive dimensions. The Milkor 380 boasts a formidable wingspan of 18.6 meters and an impres-

sive maximum takeoff weight of 1,300 kilograms.

Unveiled in 2018, the Milkor 380 embarked on taxi testing earlier this year. Daniel du Plessis, the Marketing and Communications Director at Milkor, emphasized the significance of the first flight, noting that it signifies a remarkable achievement for both Milkor and the South African Defence Industry (SADI). Flight trials and sensor integration will remain at the forefront of developments throughout the year 2023.

Specifically engineered for extended Intelligence, Surveillance, Target Acquisition, and Reconnaissance (ISTAR) missions, the Milkor 380 is designed to accommodate an external payload of 210 kilograms, which includes an assortment of weapons and sensors. Notable examples of these include the Al Tariq X-series precision guided munitions, Halcon Desert Sting DS-16 guided bombs, FZ602 laser-guided rocket launchers,

an L3-Harris gimbal, and Airborne Technologies' Self Contained Aerial Reconnaissance (SCAR) Pod.

Milkor has designated the initial five units of this UAV for domestic utilization, with the first aircraft already undergoing comprehensive testing and evaluation at its expansive 10,000 square meter manufacturing facility located in Cape Town. This commitment was solidified through a memorandum of understanding signed between Milkor, Armscor, and the South African Air Force at the Africa Aerospace and Defence (AAD) expo held in September the previous year.

According to du Plessis, this development provides an extraordinary opportunity to enhance the operational capabilities of the South African National Defence Force (SANDF), South African Police Service (SAPS), and the Border Management Authority (BMA), while simultaneously ensuring extended operational readiness through embedded support. He further highlighted the importance of shared responsibility with the local industry to secure a sustainable service life for South African end users.

The public can anticipate the first public demonstrations of the Milkor 380 at the African Aerospace and Defence Exhibition in September 2024, with Milkor taking on the role of Diamond

Sponsor for this event.

Beyond satisfying domestic requirements, Milkor is positioned to cater to the burgeoning global interest in UAV procurement. The company has strategically expanded its presence to India, the Saudi Arabia, United Arab Emirates, Poland, and South Africa, positioning itself favorably to meet the growing international demand.

Daniel du Plessis expressed Milkor's eagerness to engage with end users and decision-makers worldwide, underscoring the intrinsic value demonstrated by UAVs in active conflicts over recent years. He also affirmed Milkor's commitment to delivering cutting-edge technologies within the unmanned aerial vehicle domain, underpinned by the capability to manufacture all critical components in-house.

With an impressive endurance capability of up to 35 hours, the Milkor 380 is categorized as a medium altitude long endurance (MALE) UAV. Its five hardpoints can accommodate a diverse range of weaponry and equipment, including synthetic aperture radar, jammers, electro-optical gimbals, and more. Notably, all avionics, communications, and payload integration capabilities have been developed in-house, solidifying Milkor's standing in the UAV industry.







## The world of jet trainer aircraft has its rising star in the Aero L-39NG

The latest developed trainer jet aircraft of the Czech manufacturer Aero Vodochody, the L-39NG, has obtained unrestricted type certification since last year. This allows it to be sold to customers around the world.

The L-39NG uses modern technology and equipment. The wing and fuselage design of the L-39NG is the result of the latest developments. To maintain the best possible flight characteristics and lower weight, the wing leading edges, ailerons, engine air inlet duct, dorsal covers, nose gear doors, and many other parts of the aircraft are made of lightweight composite materials, which also gives them great strength. The wings integrate tanks that, together with the fuselage tanks, can hold more than 1,400 liters of fuel. The leading edges of the wings are certified for potential bird strikes up to 650 km/h without damage, thus ensuring sufficient protection of the wing structure and systems and thus the safety of the aircraft crew.

The L-39NG is capable of performing the role of a light attack aircraft, an aircraft for air support and reconnaissance missions, and a single, comprehensive aircraft for full training of pilots of modern air forces. The aircraft's avionics are ready for

training future pilots of fourth and fifth-generation aircraft. It also includes a wide range of simulation technologies, including the upcoming integration into a highly advanced tactical simulation center to enhance training effectiveness. Customers appreciate the high quality, practicality, and value for money.

Aero Vodochody focuses on the development, production, maintenance, and improvement of civil and military aircraft and is the largest aircraft manufacturer in the Czech Republic and one of the oldest aircraft manufacturers in the world. It was founded in 1919 and has produced more than 11,000 aircraft during its existence. It cooperates with the most renowned aircraft manufacturers. It rightfully belongs to the prestigious club of eight worldwide aircraft manufacturers that can invent, certify, manufacture, sell, and provide full after-sales service to customers.

[www.aero.cz](http://www.aero.cz)



# BURKINA FASO'S AKINCI DRONES BREAKS COVER



Burkina Faso's newly acquired Akinci long-range combat drone as seen in public for the first time.

Ekene Lionel

**B**urkina Faso's newly acquired Akinci long-range combat drone have been seen in public for the first time.

The two new Akinci drones are part of a larger haul which includes five Bayraktar TB2s as well as an assorted guided and unguided munitions.

The Akinci are likely to have been delivered to the military of Burkina Faso earlier this year, while five Bayraktar TB2 drones were delivered between April and May 2022.

This new delivery highlights the growing reliance on Turkish-made military products,

and also signifying that Africa is a new market for Turkish defence firms, and defence and aerospace exports to the continent are rising, from \$83 million in 2020 to \$288 million in 2021.

Bayraktar Akinci (meaning Raider in Turkey) is a high-altitude long-endurance (HALE) unmanned combat aerial vehicle (UCAV) manufactured by the Turkish defence company Baykar. The drone has a 5.5-ton maximum takeoff weight (MTOW), of which over 1,350 kg (2,980 lb) is payload. Akinci is equipped with two turboprop engines of either 450 hp (460 PS; 340 kW) or 750 hp (760 PS; 560 kW), as well as elec-

tronic support and ECM systems, dual satellite communication systems, air-to-air radar, collision avoidance radar, and advanced synthetic-aperture radar.

The Akinci UCAV was seen fitted with MAM-L and MAM-T munitions. However, ROKET-SAN's TEBER GPS and Laser-guided general purpose bombs, and TÜBİTAK SAGE's HGK GPS guidance kits were presented alongside the UCAV, indicating that Burkina Faso has acquired heavier munitions for AKINCI UCAV as well.

The Akinci were inspected by Burkinabe Interim Leader Ibra-





## TACTICAL ENGAGEMENT SIMULATION SYSTEMS

TRAINING OF THE FUTURE

Battle-tested, full-cycle manufacturer specializing in Force-On-Force simulators that allow the military to conduct training in conditions as close as possible to actual combat.

SKIFTECH equipment can be installed on standard weapons or armored vehicles. The software collects statistics on the exercises for each soldier and for platoons in general, enabling further analysis and objective assessment of their effectiveness. The dry-fire mode allows for endless repetition of training, making it cost-effective.

# SKIFTECH

### AEROSPACE

him Traore, who came to power with a coup on September 30, 2022. Traore is known for his heavy opposition to French policies and represents an example of France's declining influence in African countries.

Since 2016, it has faced a growing threat from rival Islamist terror groups affiliated with the Islamic State group and with al-Qaeda, resulting in 10,000 casualties, and the displacement of some two million people.

Burkina Faso is facing a grow-

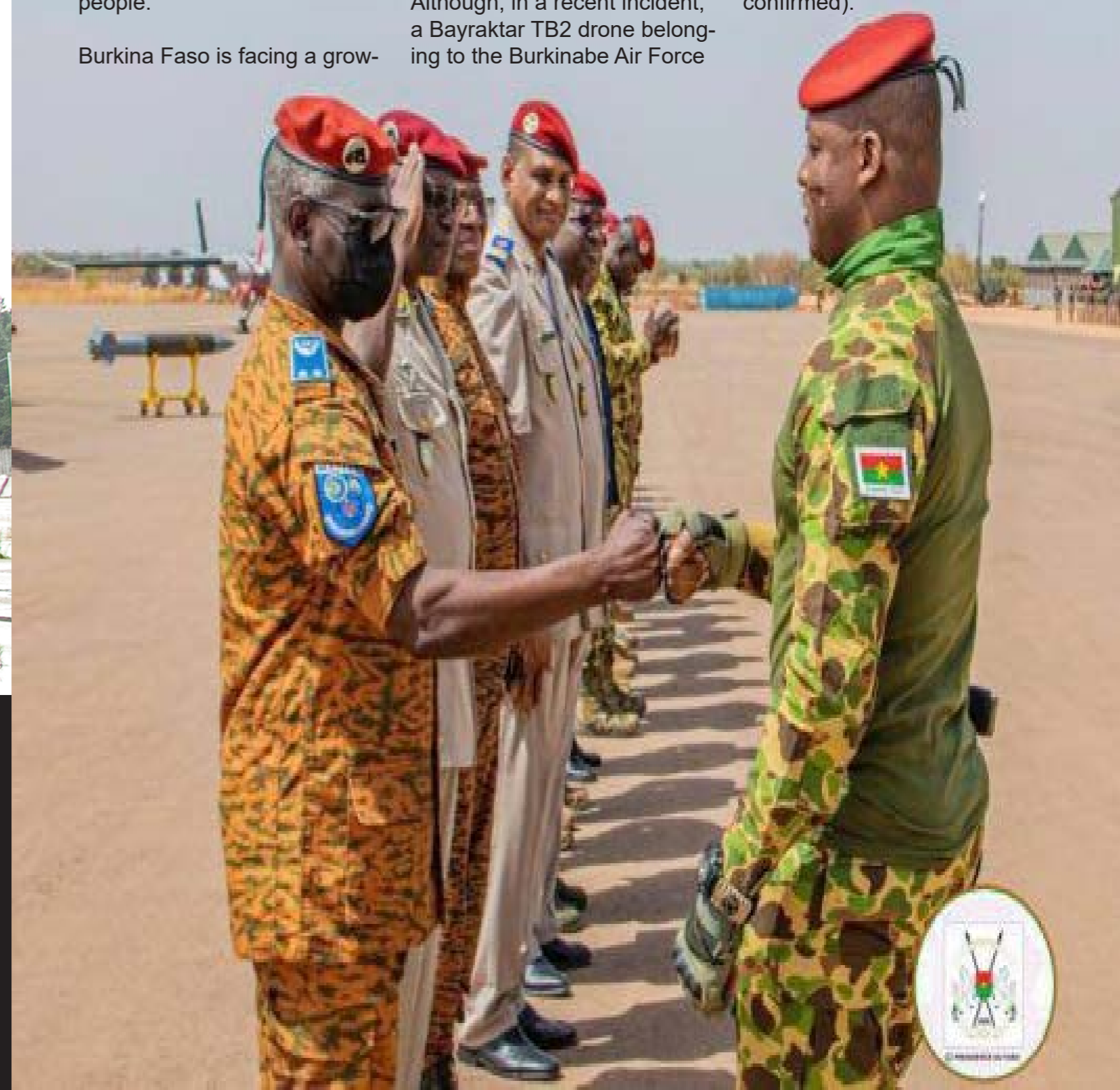
ing threat from Islamist militants who have been launching attacks from neighboring Mali and Niger. The country has been struggling to contain the violence, which has killed thousands of people and displaced more than a million.

The Akinci drone will likely be employed against terrorist and insurgent targets, including groups of terrorists travelling on motor cycles.

Although, in a recent incident, a Bayraktar TB2 drone belonging to the Burkinabe Air Force

crashed approximately 140 kilometers southeast of the capital city, near Tenkodogo. Burkina Faso hopes that the drones will help it gain an edge over the Islamist militants who have been wreaking havoc in the region.

The Akinci is steadily witnessing export success. So far, among the nine customers of AKINCI UCAV, three are from Africa, and they are Burkina Faso, Ethiopia, and Libya (not confirmed).





# NAVAL FORCE MULTIPLIER



AW159

The Multi-Role AW159 configured with integrated avionics, mission systems and comprehensive weapons suite to optimise crew situational awareness and provide an autonomous surface and sub-surface find, fix and strike capability. Operating worldwide in demanding blue water and littoral environments, the AW159 extends force sensor horizons and projection of Maritime Commander sphere of influence within the battlespace.

The AW159 interfaces seamlessly with uncrewed systems, improving force persistence during extensive and complex operations within the Maritime domain.

Visit us at World Defence Show, Booth f7



leonardo.com

 **LEONARDO**  
ACCELERATING TECHNOLOGY EVOLUTION

AEROSPACE

## LEONARDO ASSURES NIGERIA OF TIMELY DELIVERY OF M-346 JETS



**N**igeria will take delivery of the first six of 24 Italian M-346 light fighter-trainer aircraft it has ordered by year end, the country's Air Force has said.

Originally manufactured by Italy's Leonardo as a twin-seater jet trainer, the M-346 has been acquired by Nigeria in its more recent, armed M-346FA fighter format.

The 24 aircraft are due to be delivered in four batches of six aircraft, with 25 years of logistic support included in the contract, the statement added. Leonardo will profit from its maintenance operation on the aircraft in Nigeria to offer maintenance services there to its other clients in the region, the Air Force added.

The Vice President of Messrs Leonardo, Mr Claudio Sabatino assured the Chief of Air Staff (CAS), Air Marshal Hasan Abubakar, of his Company's unwavering commitment to the timely delivery of the M-346 fighter aircraft beginning with the first batch of 6 expected in Nigeria before the end of Year 2024. Mr Sabatino stated this when he paid a visit to Nigerian Air Force (NAF) Headquarters on Wednesday, 17 April 2024.

While thanking the CAS for the warm reception accorded him and his entourage, Mr Sabatino also stated that further engagement between the NAF and his Company would be necessary to conclude other aspects of the project such as the commencement of pilots and engineering training. Mr Claudio assured the CAS that when finally completed, the maintenance of the aircraft fleet would not constitute a challenge as there is a binding agreement for Leonardo's maintenance support for the minimum of 25

years. He also noted that the manufacturing of the aircraft fleet has reached an appreciable state and is being carried out with the utmost skill and expertise.

The assurance of long-term maintenance support provided by Leonardo was particularly met with appreciation by the CAS, who recognized the inherent value of such commitment in ensuring the sustained operational readiness of the entire aircraft fleet. Reflecting on the journey thus far, Air Marshal Abubakar also acknowledged the challenges overcome and expressed optimism for the future trajectory of the partnership. Envisioning the operational impact that the M-346 fighter aircraft brings to fore, Air Marshal Abubakar went on to underscore its dual role in bolstering training capabilities and augmenting operational effectiveness in diverse mission scenarios.

Moreover, the prospect of Close air support, Air Interdiction, and tactical reconnaissance as well as Advanced Pilot Training capabilities inherent in the M-346 fighter aircraft heralded a new prospect for NAF's operational versatility.

The CAS further proposed the establishment of a dedicated Program Management Office, tasked with overseeing all facets of the collaboration. Air Marshal Abubakar also used the opportunity of the visit to reiterate the significance of Messr Leonardo's physical presence in Nigeria as a maintenance hub for their long list of African clientele, whole also emphasizing the need for close coordination and synergy in achieving shared objectives with regards to the expeditious delivery of the fleet.





## Chad enhances Air Force capabilities with Turkish Akıncı drones

**Ekene Lionel**

The Chadian Air Force (AAT) has taken a significant step in bolstering its aerial capabilities by acquiring at least one Akıncı unmanned aerial vehicle (UAV) from Turkish Aerospace (TUSAŞ). This move marks a pivotal moment in Chad's military modernization efforts.

On April 21, the AAT released a video showcasing an Akıncı drone adorned with AAT markings and the Turkish-for-

mat serial number 23013. The footage captured the UAV taking off from Adji Koseï Air Base, located at N'Djamena International Airport, equipped with eight MAM-L small laser-guided bombs. Additionally, the video highlighted the training of AAT personnel by TUSAŞ experts in Türkiye.

The AAT's current fleet includes two TUSAŞ Anka UAVs and three Hürkuş-C turboprop light-attack aircraft. These were first presented during a

visit by President General Mahamat Idriss Déby Itno to Adji Koseï Air Base in July 2023.

The Akıncı, initially known as Anka-2, is a twin-engine UAV that boasts a maximum take-off weight of 3,300 kg and can carry a payload exceeding 750 kg. This is a significant enhancement over the Anka's 1,700 kg weight capacity with a 350 kg payload. TUSAŞ has reported that the Akıncı is designed for a 50-hour endur-

ance, although the longest recorded flight to date is 41 hours.

Chad is now the second-known export operator of the Akıncı, following Kyrgyzstan's Border Guard Service. The latter displayed the UAV alongside a heavier Bayraktar Akıncı during a visit by the President of Kyrgyzstan to the new UAV base at Issyk-Kul International Airport on October 28, 2023.

The Akıncı is engineered for both day and night Intelligence, Surveillance and Reconnaissance (ISR) missions, as well as strike operations. It can be outfitted with electro-optical/infrared and synthetic aperture radar (SAR) payloads, along with a variety of air-to-ground weapons. The UAV's three hardpoints support a 750 kg payload,

compatible with an array of munitions including TEBER-81 and TEBER-82 laser-guided bombs, and L-UMTAS, MAM-L, Cirit, and MAM-C guided missiles. Chad's Akıncı has been observed carrying eight MAM-L munitions and what seems to be a Hensoldt Argos II electro-optical gimbal.

Powered by two PD-170 twin-turbocharged diesel engines, the Akıncı can perform long-endurance operations at altitudes up to 12,000 metres. With an optional satellite communications payload, it can execute beyond line of sight operations. The UAV measures 12.5 metres in length, has a wingspan of 24.2 metres, and can endure up to 50 hours of flight time without weapons.

TAI also offers a maritime patrol variant of the Akıncı, equipped with a synthetic aperture radar, Automatic Identification System (AIS), sonobuoy pod, and magnetic anomaly detector (MAD) boom. Efforts are underway to integrate a lightweight torpedo onto the UAV.

Developed from the combat-tested Anka UAV, the Akıncı has been serving in the Turkish Navy since October 2021. Angola was the first African nation to place an order for the Akıncı, with TAI confirming the contract in March 2023. This followed an initial interest expressed by Angola in 2021, leading to a \$93 million contract for UAVs through the Angolan public corporation Simportex.

Although Algeria was reported to be the first African export customer for the Akıncı, with claims of an acquisition of six aircraft, this has not been officially confirmed.

The acquisition of the Akıncı by Chad comes shortly after the delivery of three Hürkuş-C trainer/light attack aircraft and two Anka UAVs from TAI, which were showcased by President Déby in July 2023. Alongside these aircraft, MAM-L and MAM-C munitions were also introduced into service. In January, Chad's Air Force recognized three pilots and seven technicians who completed qualifications on Hürkuş aircraft.

The ANKA-S and Akıncı share a common hull structure, offering significant benefits in maintenance, repair, training, and logistical support. To further enhance its operational capabilities, Chad sent 20 engineers for training at TUSAŞ.

In a related development, TAI disclosed the delivery of two Hürkuş aircraft to Niger in May 2023, marking the first confirmed export order for the aircraft type.

The Akıncı UAVs will play a crucial role in Chad's defense strategy, particularly in combating terrorism, mercenary activities, kidnappings for ransom, and various forms of banditry. This technological advancement signifies a leap forward in the nation's commitment to maintaining security and stability within its borders and the region.





**Theme:**

**"TRANSFORMING AFRICA'S DEFENCE SECTOR:  
STRENGTHENING CAPACITY AND CAPABILITIES  
FOR 21ST CENTURY NATIONAL SECURITY"**

**Book Stall/Space**



**Date: 13th - 15th August, 2024**  
**Venue: Ladi Kwali Conference Centre,  
Abuja Continental Hotel, (Former Sheraton) Abuja.**

+234 (0) 812 7011 110 info@niseceexpo.com niseceexpo.com

LAND | SEA | AIR

# Mwari. Legendary African Warrior



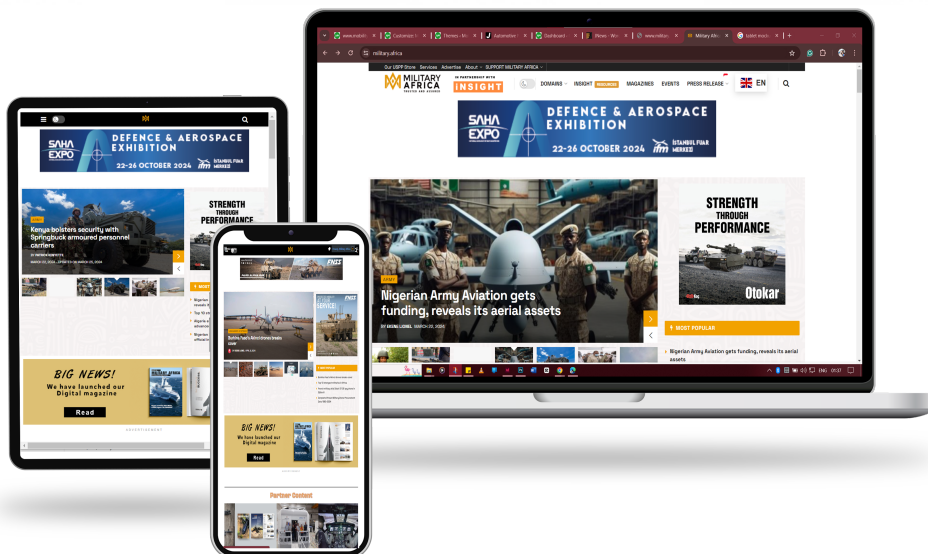
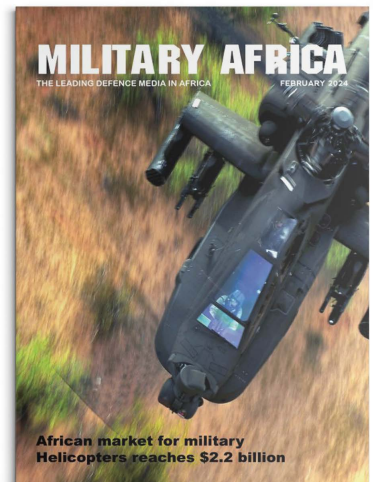
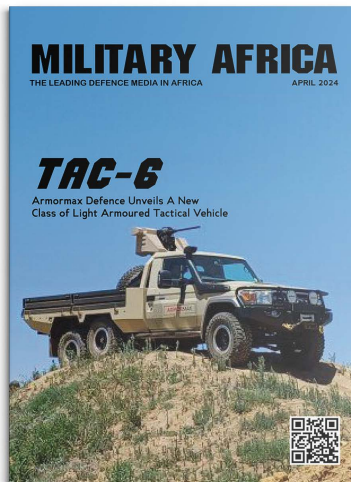
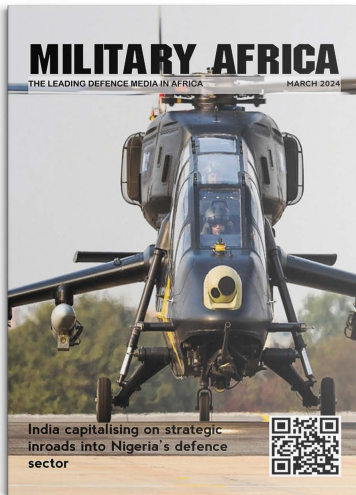
The Mwari is a legendary all-seeing and all-knowing deity as described in the Shona language. Today the legend lives on in the multi-mission African-designed and manufactured aircraft. Equipped with the latest technology there is little that the Mwari cannot see or hear well above the clouds. Combining the best features of a reconnaissance aircraft with those of an attack helicopter, Mwari can stand watch for hours on-station and successfully interdict any threat with its precision weapons systems as guided by its onboard real-time, real-life actionable intelligence. It's the ultimate warfighter and game-changer for African Air Forces.



**PARAMOUNT**

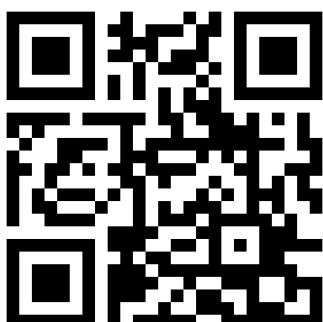
PARAMOUNTGROUP.COM





**Military Africa's mobile-friendly website and magazines give professionals the ability to quickly and easily access the latest news on any device, through unrivalled timely and accurate news curated by our international analysts.**

**Military Africa brings your product in front of thousands of interested audiences. Now you can be assured of a great business growth.**



**LEADING DEFENCE MEDIA IN AFRICA**

**Advertising and Editorial Enquiries**

Email: [Business@military.africa](mailto:Business@military.africa)

Tel: +234 810 368 9898