

# RISK INSIGHTS

Jamaica Civil Aviation Authority's Digital Risk Management Newsletter

VOLUME 8 | JANUARY 2023

## 2022 IN REVIEW

We've come a long way!!!!  
But there is still some  
way to go.

Source: AdobeStock

Risk Insights celebrates the JCAA's risk management accomplishments for 2022 and highlights the areas of focus for 2023.

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A hand is holding a clear crystal ball in the foreground. The crystal ball reflects the colorful bokeh lights of a Christmas tree in the background. The lights are out of focus, creating a soft, glowing effect. The overall scene is festive and celebratory.

# P E R F O R M A N C E

Path to Risk Mitigation.....

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Source: AdobeStock

# GLOBAL RISK ROUND UP - 2022

After two (2) turbulent years, the global economy began 2022 with what seemed like new vigour. The Ukraine War intervened. Pricewaterhouse Coopers has reported that top executives had trouble keeping up with an ever-growing array of risks in 2022. Surging inflation, and supply chain constraints were key events being managed. The war in Ukraine added to their earlier worries concerning cybersecurity, ransomware, and rapid technological changes.

## THE WAR IN UKRAINE DOMINATED 2022

On February 24, 2022, the Russian Federation launched a large-scale armed attack against Ukraine. Russian forces launched strikes across the entire country and entered the territory of Ukraine in ten regions: Kyiv, Chernihiv, Donetsk, Kharkiv, Kherson, Luhansk, Mykolaiv, Sumy, Zaporizhzhia, and Zhytomyr. Russia's invasion of Ukraine started a war that has resulted in thousands of civilian deaths. The Office of the United Nations High Commissioner for Human Rights (OHCHR) verified a total of 6,826 civilian deaths during Russia's

## INTRODUCTION

invasion of Ukraine as of December 18, 2022. Of them, 428 were children (Statista.com). It is also estimated that over 14 million Ukrainians have been displaced.

Along with human devastation, the war disrupted already fragile global supply chains. It also caused a spike in energy prices, shortages, and rising costs for food and commodities. Governments responded by imposing a range of sanctions and export control restrictions on Russia. Many multinationals (across a range of industries) including BP, Exxon Mobil, H&M, VISA, Citi Bank, IBM, and McDonalds *et alia* have curtailed their operations in Russia. Russia's response has made it difficult for some of those companies to extract millions of dollars in assets from Russia, highlighting the risks that companies face when overseas investment is contemplated, or when selecting critical service and infrastructure partners.

The Government of Jamaica had anticipated that the impact to Jamaica would have been through global energy prices and wheat dependent commodities such as flour. "Global inflation impacts local inflation and external shock. Energy prices might go up as a result of uncertainties in the energy market", The Most Honourable Andrew Holness, Prime Minister of Jamaica.

International aviation is being impacted by the rerouting of flights. Several non-Russian airlines now divert flights to longer routes to avoid restricted Russian airspace. Longer routes increase operating costs, including fuel prices. Jet fuel prices have risen sharply since the start of the conflict. They were at USD 150 per barrel on March 21, 2022 (daily closing prices), up 39% on the month and 121% year-on-year.





Source: AdobeStock

The annual inflation rate in the US slowed for a fifth straight month to 7.1% in November 2022, the lowest since December 2021, and below forecasts of 7.3%.

Despite the greater-than-anticipated slowdown, annual inflation is set to remain more than three times the 2% target that was set by the Federal Reserve, pointing to broad price increases across the economy (Tradingeconomics.com).

## INTRODUCTION CONTINUED



Source: AdobeStock

Airlines have two options in terms of managing the increased cost of fuel; they must either absorb the costs themselves, which may be a challenge as profit margins are already thin, or pass the higher fuel costs on to passengers through increased air fares. At a time of already elevated inflation, higher air fares could reduce demand for air travel (IATA).

### **RESILIENCE**

[RESILIENCE IS OUR WORD FOR THE PERIOD AHEAD!!](#)

In a volatile world, resilience is an increasingly critical prerequisite for corporate performance (McKinsey, 2022). The COVID-19 pandemic has shown that organisations that fare well in the face of uncertainties are those who prepare, and plan ahead and build up their response capabilities in advance. Contingency plans are instrumental to managing through crises. The specific threats may not always be known, however, the disruptive currents can range from accelerating digitisation, cyberthreats, geopolitical conflict, supply chain disruptions, inflation and price volatility, or the dreaded recession.



**Mr. Rohan Campbell**  
Director General (Acting)  
The Jamaica Civil Aviation  
Authority

## Performance signals for good risk management

*“A Data-Driven Decision Model is an excellent addition to the enterprise risk management goals of any organisation; it makes sound business sense. We all record and track performances in many aspects of our lives, making changes to improve performance, thwart threats, capitalise on opportunities, and respond quickly to sudden changes in our environment.”*

The Jamaica Civil Aviation Authority has, over the past few years, enhanced its ability to manage current and emerging risks. We use empirical data to complement and validate our qualitative risk assessments. Through concerted effort, risk management has been integrated into our activities across the organisation.

The improvements are evident in several key JCAA programmes and initiatives, which include: (1) business continuity planning and hurricane preparedness (coordinated with the input of every department); (2) implementation and promotion of security awareness programmes by our Corporate Security Department; (3) implementation of risk-based oversight activities by the Flight Safety Department; (4) analysis and monitoring of air operator permits and licences issued by the Economic Regulation Department; (5) the ongoing implementation of Safety Management Systems across the departments within the Air Navigation Services Division; (6) monitoring the health of key CNS/ATM infrastructure and systems through our Network Operations Control Centre (NOCC); (7) organisation-wide training for Occupational Safety and Hazards; (8) enhanced cyber-threat defences implemented by the Information Technology Department; and



(9) enhanced controls implemented by the Finance Department throughout the period of lower aviation activity brought on by the COVID-19 pandemic.

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**Throughout 2022, each Department used risk management techniques to enhance, enable, and protect the operations of the Authority.**

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As a key mitigation strategy in managing the impact of the COVID-19 pandemic on its workforce and its operations, prior to nationally-directed actions, the Authority instituted stricter protocols. These protocols lasted beyond the national timeline for such measures. The efforts of each team member to comply with the preventative and management measures were apparent, and appreciated. It was team effort, however, the Human Resource, Office Management, Facilities Management, staff associations and unions were key resources for navigating the some of the challenges presented.

**To each JCAA Team Member, including members of the JCAA Board of Directors, THANK YOU for enduring the changes. We look forward to your continued support as we strive to elevate our performance as sound risk managers.**

## The Jamaica Civil Aviation Authority



**"Committed to the Safe and Orderly Development of Aviation in Jamaica"**





**CORPORATE SERVICES DIVISION**

“ It was the best of times,  
it was the worst of times....”



**Mrs. Nichole Morgan**  
Deputy Director General  
Corporate Services

*“I look forward to each edition of the Risk Insights Newsletter. I am always amazed by the creativity and talent that exists. Risk Insight demonstrates the commitment of a team to high standards. It educates and informs.”*

## Performance par excellence

Charles Dickens provides an apt backdrop for the pandemic years; the past two (2) years and ten 10 months. “It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair.” We all experienced a shock that we had not before seen in our lifetimes. It was a collective experience globally, regionally, nationally, and within our organisation. The risks were pronounced, as the core business felt the tremors. What we know about aviation, however, is that it typically bounces back quickly. As we end this year, (April 2022 to November 2022),

we have exceeded total income (in Jamaican dollars) compared to the similar period (April 2019 to November 2019) in the baseline year ending March 2020. While the Covid-19 pandemic jolted our personal and professional priorities, it provided the opportunity to refocus and redouble our efforts to be the change we want to see. The team spirit kicked in and there were seamless pivots for such things as the production of policies that address Infectious Diseases, Occupational Safety and Health, and Flexible Work Arrangements. Meetings were convened online, virtual recruitment was enhanced using the JAZZ HR platform and contracts were executed using DocuSign. These were all initiatives to, first and

## CORPORATE SERVICES

foremost, safeguard our team members' health. Although, Several team members contracted the coronavirus, thankfully, there was no extreme case. The engagement of external medical expertise (Essential Medical Services) to partner with us, as well as the establishment of the Pandemic Management Team which consisted of members of the Legal, Human Resource, Research, Planning and Risk Assessment, Corporate Communications, and Air Traffic Management Departments as well as key union and staff association partners, played a critical role in safeguarding The Authority's Team Members and its operations.

**The Corporate Services Division** was not daunted. Our role as the Authority's enabling division was highlighted throughout the year as pandemic management measures continued. Many of our Team Members, particularly our Facilities and Office Management Teams were required to be onsite daily, and in some instances, provided 24/7 sanitisation services as a key element of The Authority's pandemic containment strategy.

### **Safety and Security**

Some projects were deferred as a cost containment measure, because of supply chain issues. The Corporate Services Division, however, continued to pursue strategies that were achievable during the pandemic and that would improve overall safety. The construction of two (2) emergency staircases on Building A at the Winchester location eliminated a significant safety hazard and lessened The Authority's risk exposure. In the upcoming year, The Corporate Services Team will continue its thrust toward making The Authority's work environment safe, functional, and comfortable for our teams, clients, customers, and other stakeholders. This strategy is underscored by the renovation of the Flight Safety Department, which will be concluded in this Financial Year.

## **Corporate Social Responsibility (and Environment)**



Source: JCAA-CCIS

*"Someone is sitting in the shade today because someone planted a tree a long time ago"*

# REFORESTATION (ADOPT-A HILLSIDE PROJECT)



Under the Strategic Goal,  
**'Sustainability, Resilience and Environmental Protection'**

A tree planting exercise, aligned with the GoJ's national tree planting initiative and coordinated by the Corporate Services Division saw wide participation across the organisation. This initiative allowed the Authority to promote the objectives of health, safety, environment, quality commitment, governance, corporate social responsibility and greater collaboration with its stakeholders on matters pertaining to the environment. On July 2, 2022, the Team, in collaboration with the Forestry Department, planted trees on three (3) hectares of land in Ballintoy, St. Ann. The team planted approximately five hundred (500) Caribbean Pine seedlings, five hundred (500) Honduras Mahogany seedlings, five hundred (500) Blue Mahoe seedlings, three hundred and seventy-five (375) West India Cedar seedlings. This is only one small effort at mitigating the effects of air transport on the environment.

## CORPORATE SERVICES

### **Enterprise Risk Management**

The Enterprise Risk Management Framework is reviewed annually. Over the past year, the effort to methodically identify hazards and risks, and to incorporate control measures, barriers and risk treatment actions into The Authority's strategic plans continued. Work also continued on the update of the enterprise risk management apparatus and tools. The approach taken over the course of the year bolstered The Authority's capacities to capably manage threats and grasp opportunities within the environment.

### **Communication**

During the pandemic, we improved significantly in this area. More than seventy (70) Staff Advisories were sent out to our Team on updates, and mitigation measures that were implemented.

### **Records and Information Management**

The Authority's Records and Information Management Programme is a key mitigation strategy for risks associated with the management of public records, and the access to, and security of information.

On November 1, 2022, the Division initiated a Records and Information Management (RIM) Programme, in collaboration with the Jamaica Archives and Records Department (JARD) through the Ministry of Education and Youth. The RIM Programme aligns with the Government of Jamaica (GoJ) initiative to streamline the document systems of the Ministries, Departments and Agencies. A Records and Information Management (RIM) Committee was formed to spearhead the Programme.

**Civil Aviation Authority Training Institute (CAATI) Transition:** A comprehensive review of the CAATI is currently being conducted in partnership with consultants Pricewaterhouse Coopers. The consultancy will address some of the risks related to the training of key technical personnel, and the

diversification of The Authority's revenue streams.

Challenges persist. The Authority is managing over 600 risks. Fifteen (15) have been elevated to the Corporate Risk Register which has the visibility of the Board of Directors through the Audit and Risk Management Committee (ARMC). Many strides have been made. Training of HODs has taken place and learning continues. The Enterprise Risk Management Policy has been revised and awaits the Board's approval.

**T**he Corporate Services Division recognises that without the support from our Team Members, key projects could not be implemented. I take this opportunity therefore, to thank each Head of Department and their teams for their relentless drive in fulfilling the mandate of the Division and by extension the Authority. Corporate Communication; CAATI; Facilities Management, Human Resource, Information Technology; Public Procurement, Office Management, Research, Planning and Risk Assessment and Security Management.

**YOU ARE MY A TEAM.**

On behalf of the Corporate Services Division, we wish all our Team Members a Happy New Year that sees our dreams, desires, goals fulfilled and the strength and foresight to deal with the challenges that may come our way!





A tall, cylindrical air navigation services tower with a glass-enclosed observation deck at the top, set against a cloudy sky. The tower is the central focus of the image. In the foreground, there is a grassy area and a paved road. A semi-transparent dark grey box is overlaid on the lower half of the image, containing the title text. A thin vertical green line is on the left side of the box.

# AIR NAVIGATION SERVICES DIVISION

## Collaboration and Significant Analysis



**Mr. Howard Greaves**  
Deputy Director General  
Air Navigation Services

### Performance: Strong finish

*“The ANS Division began the calendar year with some of our resilience and redundancy capabilities being less than ideal. This primarily affected navigation and surveillance capabilities. In June 2022, the Mount Denham Radar Facility was brought back into full operation; significantly improving operational and redundancy capabilities”*

### Navigation

The Doppler Very High Frequency Omni-directional Range systems (DVORs) located at the Sangster International Airport (SIA) and Norman Manley International Airport (NMIA), serve as navigational aids (NAVAIDs) in the provision of Air Traffic Control Services to the Kingston Flight Information Region (FIR); Jamaica’s airspace. The components also provide redundancy for Jamaica’s radar surveillance capabilities.

### Challenges

The NMIA DVOR had not been performing optimally, but the decommissioning of the SIA DVOR in June 2021, was necessary to accommodate its planned replacement. Our navigational redundancy capabilities was therefore, reduced.

Our response action focused on optimising the NMIA DVOR. Significant analysis and troubleshooting were conducted through the collaborative effort of the Engineering and Maintenance Services (EMS) Department Team and the equipment manufacturer. This resulted in significant improvement in the performance and reliability of the NMIA DVOR.

### Mitigation and restoration

The SIA DVOR was also recommissioned in September 2022 which brought our navigation capabilities to nearly 100%. The impact of these outages and disruptions was mitigated through the issuance of Air Traffic Management Directives and Aeronautical Information Publication (AIP) supplement information to the users of the Kingston Flight Information Region (FIR).



Source: JCAA - CCIS Department

## Surveillance

The ATS surveillance in the KIN FIR is facilitated through a constellation of three (3) Monopulse Secondary Surveillance Radar (MSSR) facilities located in Jamaica at Palisadoes in Kingston, Mount Denham in Manchester, and Norwood in St. James. These local facilities are supported by MSSR feeds from further afield: Grand Cayman and Puerta Cabeza, Nicaragua.

## Programmes

The Safety and Compliance Department launched a Voluntary Reporting System (VRS) in November 2022. The VRS provides a channel for team members within the ANS Division to voluntarily report aviation occurrences or hazards. This system allows ANS personnel (excluding the Directors) to provide voluntary reports on actual and/or potential safety-critical matters within any unit of the ANS Division. It is anticipated that the VRS will strengthen the Division's safety improvement and risk mitigation strategies.

## Training

The Air Traffic Management (ATM) Department trained and certified five (5) new ATC Supervisors and eight (8) new Aerodrome Controllers this year, bolstering the cadre of these groups. At the ATC Supervisor level, this addressed a critical shortage that had elevated the likelihood of disruption in the provision of Air Traffic Services.

## PLANNED IMPLEMENTATIONS FOR 2023

1. A backup Mejoras al Enlace de Voz del ATS (MEVA) Node
2. Instrument Landing System at Sangster International Airport
3. Commission of Cooper Hills Air to Ground Radios
4. Replacement of the Radar Antennae at Manley Radar Facility

Thanks to all members of the ANS Division: Air Traffic Management (ATM), Safety & Compliance, Engineering & Maintenance Services (EMS), Aeronautical Information Management (AIM), and the ANS Training Unit. Thanks also to the Information Technology Department for the services it provided over the period.

**Special thanks to Mr. Deano Ledford who assisted in the preparation of this article for the ANS Division.**





**REGULATORY AFFAIRS DIVISION**  
Efficiency and Professionalism



**Mr. Michael Hepburn**  
Deputy Director General (Acting)  
Regulatory Affairs

## Performance fueled by improved efficiency, professionalism, and dedication

### Rule Making

The Regulatory Affairs Division, through the Rule Making Unit, increased its partnerships with various stakeholders in the development and update of the regulations for the safety oversight of the air transport industry. The primary and subsidiary legislation governing civil aviation is being updated. This includes particular attention to regulations related to unmanned systems. The update process is at an advanced stage, and the draft legislation are expected shortly and will greatly assist in harmonising the aviation standards into a fluid machine for the future.

### Economic Regulation

Terms of Reference were prepared for the fifth quinquennium (Q5) Airport Charges review related to the Norman Manley and Donald Sangster International Airports. Proposals are being sought for qualified airport regulatory consultants. The review is expected to culminate in new airport charges and conditions for the five (5) years commencing January 1, 2025.



Source: Adobe Stock

## Flight Safety

The Flight Safety Department achieved wins in four (4) main areas: (1) human resource and training; (2) industry engagement; (3) certification; and (4) operational efficiency through its surveillance activities.

**Human Resource and Training:** Progress was made in filling vacancies in Airworthiness (AW) particular to avionics. Overall, five (5) aviation safety inspectors completed the required training to receive delegation in the areas of: (1) Air Worthiness; (2) Operations; (3) Cabin Safety; and (4) Aerodromes.

**Industry Engagement:** Seven (7) industry engagement seminars were conducted in areas including: (1) Language Proficiency; (2) Time Between Engine Overhauls; (3) Certification process; and (4) General Aviation. The highlight was the recent issuance of the Directive on Language Proficiency and Flight Safety Notification providing guidance to stakeholders.

**Certification:** The certification process progressed with two (2) of Jamaica's international airports during the year.

**Surveillance:** The number of inspections for the year exceeded planned inspections by 14%. The GoCanva software platform was introduced, reportedly improving the efficiency of ramp inspections. Safety data capture storage and analysis was made more effective.

## COMMENDATIONS AND THANK YOU:

Members of the Regulatory Affairs Division continue to perform at the highest professional level.

The personal sacrifice and commitment of these team members ensure that safe, secure and orderly operations across the aviation industry are maintained.



"The overlapping crises of the war in Ukraine, the ongoing pandemic and the surge in food and fuel prices are painful reminders that governments need to be prepared to manage massive, unexpected shocks that unravel very quickly."





The 2022 Atlantic hurricane season produced 14 named storms, 8 became hurricanes and 2 intensified to major hurricanes. An average hurricane season has 14 named storms, 7 hurricanes, and 3 major hurricanes.

Ukraine ranks 77th on the Human Development Index. It is the poorest country in Europe by nominal GDP per capita. **Due to its extensive fertile land, pre-war Ukraine was one of the largest grain exporters in the world.**

**The World's GDP is USD 103.86 trillion as of 2022.** The US economy is the largest in the world, followed by China, the world's second-largest with annual growth that consistently outpaces the United States.

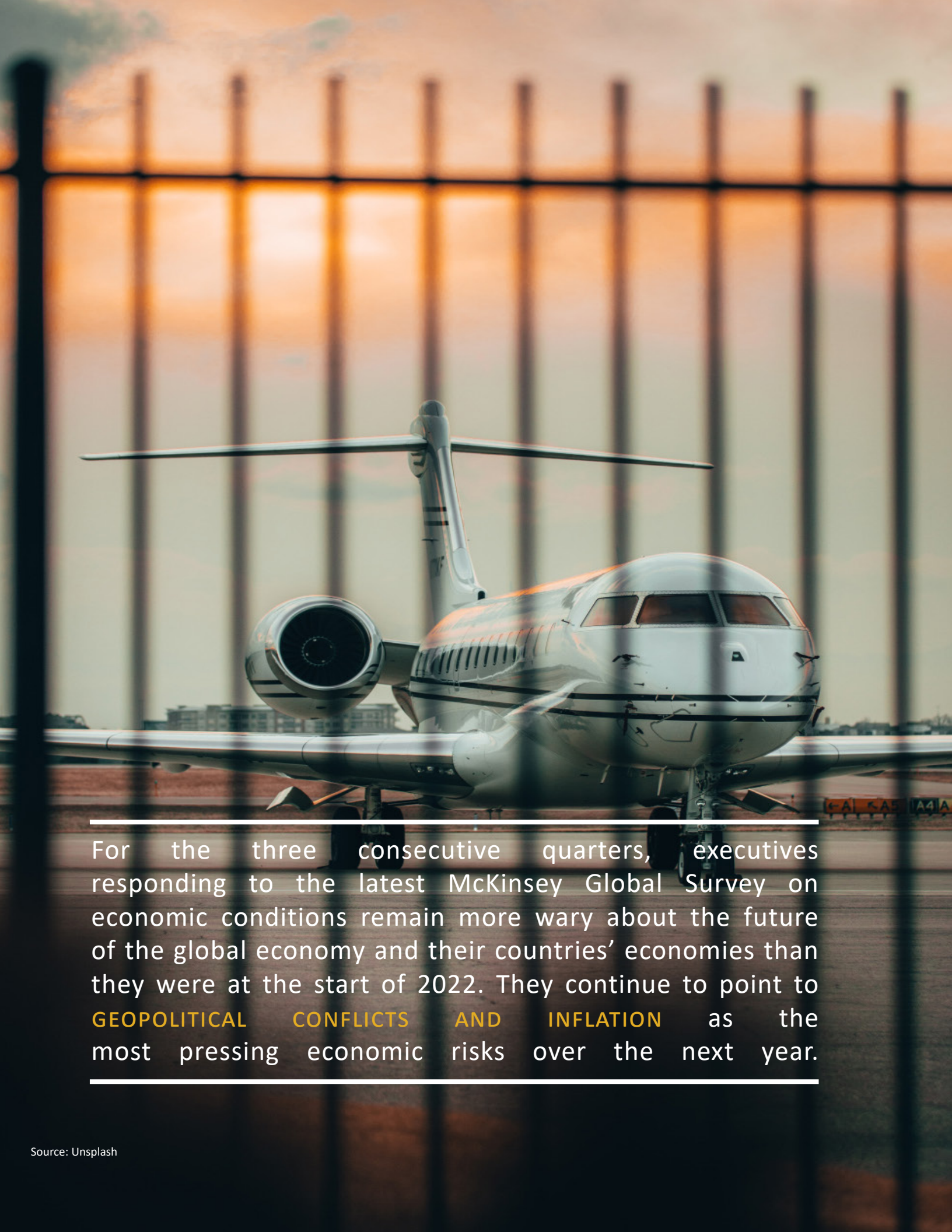
The Jamaica Consumer Price Index increased 8.5 percent for the year ended March 2022, following **a rise of 7.9 percent from February 2021 to February 2022.**

Jamaica has recovered 90 percent from the COVID-19 pandemic in the tourism sector. The arrivals in 2022 are likely to be well over 3 million. Earnings are expected to exceed 2019 levels by ~ US\$500 million.

According to the National Bureau of Economic Research (NBER), the Great Depression lasted from December 2007 to June 2009, longer than the Covid recession, which occurred between February 2020 and April 2020.

Champagne production skyrocketed from 300,000 to 20 million bottles per year between 1800 and 1850, as the world started ordering more for ship christenings and New Year's celebrations.

More than 4,100 publicly disclosed data breaches occurred in 2022 (an estimated 22 billion records were exposed). Costa Rican President declared a national emergency in May 2022 due to ransomware attacks.



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For the three consecutive quarters, executives responding to the latest McKinsey Global Survey on economic conditions remain more wary about the future of the global economy and their countries' economies than they were at the start of 2022. They continue to point to **GEOPOLITICAL CONFLICTS AND INFLATION** as the most pressing economic risks over the next year.

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# PUZZLE CHALLENGE

## JUMBLE

Unscramble the words below. One letter to each square to form five words

IERANKU						
			○			○
AIDSEES						
○		○	○			
LNEYCOC						
	○		○			
VAYPRIC						
○						
SACEHKR						
○				○		

A SCRAMBLED WORD GAME



Now arrange the circled letters to form the answer. The cartoon above is your clue.


**YOUR ANSWER WILL FIT IN THE CIRCLES BELOW**

○	○	○	○	○	○	○	○	○	○
---	---	---	---	---	---	---	---	---	---



Source: VectorStock

# HAPPY NEW YEAR!



For inquiries contact

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