

radar

NEWSLETTER OF FUTURE IMPACTS ON
DEFENSE AND INTERNATIONAL SECURITY

Nº 5 - OCTOBER 2020 - www.projektoradar.com.br



Ministry of Defense approves TG for managing the Blue Amazon

United States Department of Defense announces space defense strategy

Narco-submarines serve as inspiration for North American maritime strategy

Chinese government sets new rules for selling technology

Pandemic compromises public finances and worsens food insecurity

US Navy begins prospective studies on the future of aircraft carriers

Modern war may be destroying brains

To get to know China, follow the trail of information

Prospective study evaluates post-pandemic Venezuelan society

ABIN article addresses global trends for Defense by 2040



Newsroom

The **RADAR Newsletter of Future Impacts on International Security and Defense** is a monthly digital product developed by researchers of the Prospective Scenarios in Defense and Security Research Line of the Scenarios and Simulations Laboratory (LSC) of the Brazilian Naval War College (EGN). It aims to stimulate and disseminate knowledge on signs and tendencies that may shape the world's context and impact the future of Defense. RADAR Newsletter does not represent the official position of the Brazilian Navy (MB) or the Brazilian Naval War College (EGN).

COORDINATION

Prof. Dr. Thauan Santos (PPGEM/EGN)

SCIENTIFIC BOARD

CALte. (RM1) Marcio Magno F. F. Silva (SSP/EGN)

Ten. Cel. Av. (R1) Paulo Roberto Batista (UNIFA)

CMG (RM1 IM) Prof. Dr. Claudio R. Corrêa (PPGEM/EGN)

Prof. Dr. Thauan Santos (PPGEM/EGN)

Prof. Dr. Ana Paula Moreira Rodriguez (COPPEAD/UFRJ)

Prof. Dr. Nathalie Serrão (PPGCD/UFF)

Cesar Castello Branco Martins - Doctoral Student (PPGEST/UFF)

EDITORIAL BOARD

Caroline R. T. Colbert - Doctoral Student (PEPI/IE/UFRJ)

MSc. Thiago Jacobino Honório (PPGEST/UFF)

MEDIA, SOCIAL NETWORKS AND DESIGNER EDITOR

Giselli Nichols - Doctoral Student (PPGEM/EGN)

Journalist (MTb 23469-RJ)

TRANSLATE

Prof. Dr. Bernardo Salgado Rodrigues (IRID/UFRJ)

Dominique M. de Souza - Doctoral Student (PEPI/IE/UFRJ)

MSc. Vinícius Ricardo Ferreira Janick (PPGEM/EGN)

IT MANAGEMENT AND NETWORK

INFRAESTRUCTURE

Marcelo Andrade de Barros - Post-graduate (UCAM)

Follow Us

 /informativoradar

 /informativoradar

 /informativoradar

 contato@projetoradar.com.br

 www.projetoradar.com.br

Laboratório de Simulações e Cenários

PROSPECTIVE SCENARIOS IN DEFENSE AND
SECURITY RESEARCH LINE

Avenida Pasteur, 480 - Urca - Rio de Janeiro - RJ -
Brazil - Zip Code.: 22290-240

EDITORIAL

We have reached the fifth edition of the **RADAR Newsletter on Future Impacts on International Security and Defense** and it is with great satisfaction that we present the TOP 10 subjects chosen by the Scientific Council. In this issue, we highlight the creation of the Technical Group for the management of the Blue Amazon, which, among other duties, is the identification of gaps in the monitoring of Brazilian Jurisdictional Waters (AJB) and the evaluation of the strategic project of the Brazilian Navy for SisGAAZ.

In addition, we address different U.S.-related themes, such as prospective studies on the future of its aircraft carriers, the announcement of new guidelines for the Space Defense Strategy, the influence of narco-submarines on U.S. logistics and maritime strategy, and the investigation of traumatic brain injury effects on U.S. Special Operations Command military personnel. Other issues discussed are China's continued concern for food security for its geopolitical and economic stability and the establishment of new rules for exporting Chinese technologies under the prerogative of national security. In addition, other contributions point to global defense trends in Brazil through 2040; the negative impacts of Covid-19 on public finances and food insecurity; and a prospective study by the Venezuelan government in the post-pandemic social context.

Enjoy your reading!

Prof. Dr. Thauan Santos
Coordinator

Ministry of Defense approves TG for managing the Blue Amazon

Caroline Colbert
Doctoral Student (PEPI/IE/UFRJ)

On July 30, the Interministerial Commission for Resources of the Sea (ICRS) approved the creation of the Technical Group (TG) "Management System for the Blue Amazon (SisGAAz)", coordinated by the ICRS Secretariat (SECIRM). This TG has several purposes. Among them is the identification of gaps in the monitoring Brazilian Jurisdictional Waters (BJW); the assessment of the adequacy for the strategic design of the Brazilian Navy to meet SisGAAZ demands, as well as the improvement and implementation of solutions to solidify it.



Impact on Security and Defense:

Space technology is critical to the national security both on land and at sea. Therefore, the BJW's satellite monitoring aims to curb illegal fishing, unregulated vessels, illicit trafficking, save and rescue, illegal navigation around offshore oil and gas platforms and even oil spill monitoring.

Source: BRASIL. "Resolução nº 12, de 30 de julho de 2020. Diário Oficial da União: Seção1", Brasília, DF, 150, (August, 2020): 11. <https://www.in.gov.br/web/dou/-/resolucao-n-12-de-30-de-julho-de-2020-270710008>.

US Navy begins prospective studies on the future of aircraft carriers

Luis Miguel Klen Leite
Master Student (PPGEM/EGN)

Jéssica Leite dos Santos
MSc. (PGEM/EGN)

The US Navy has developed prospective studies to define its structure in the coming decades. Among such initiatives is the Blue-Ribbon Future Carrier 2030 (FC-2030) Task Force, which aims to indicate trends about the strategic use of aircraft carriers and their aviation. The US Navy analyzes trends for this purpose and has noticed that some changes suggested on the basis of previous studies have not been implemented, probably due to reservations regarding the reconstitution of industrial efforts, as in the manufacture of the Gerald R. Ford class ship. The practice of conducting future studies to support strategic decision making persists in the institution and is considered to be in line with the demands of the sector and its high level of complexity.

Impacts on Security and Defense: Depending on the results of the continued studies achieved through the aforementioned study, the American super aircraft carriers, one of the main power projection platforms in the USA and symbol of its military hegemony, may be changed in favor of platforms that are smaller, less costly and less vulnerable to the new anti-ship missiles in use by countries like

Source: ECKSTEIN, Megan. Modly: parallel fleet studies could reshape future of aircraft carriers. Parallel Fleet Studies Could Reshape Future of Aircraft Carriers. *USNI News*, 12 March 2020. <https://news.usni.org/2020/03/12/modly-parallel-fleet-studies-could-reshape-future-of-aircraft-carriers>.



United States Department of Defense announces space defense strategy

Armando Condelo
Graduate Student (UCAM)

Caroline Colbert
Doctoral Student (PEPI/IE/UFRJ)

The US Department of Defense (DoD) announced the new guidelines for the Space Defense Strategy, which aims to ensure the advancement of a competitive environment for power in the sector. These goals were defined as maintaining the superiority of space, providing support in national operations, whether joint or combined, and ensuring spatial stability in the long run. To make this possible, the department seeks four priority efforts: to achieve a military advantage in space, to integrate military space power into national operations, to strategically shape the environment and to cooperate with allies.

Impact on Security and Defense:

The Space Defense Strategy is one of the US responses to the advancement of China's and Russia's space military capabilities, and a way to promote strategic containment in space, since the satellites used for reconnaissance, communications, high-precision targeting and the operation of "fifth generation" drones and fighters are tempting targets.

Source: United States Space Force.
Department of Defense Releases Defense Space Strategy, August. 2020. <https://bit.ly/36um2ow>.



Modern war may be destroying brains

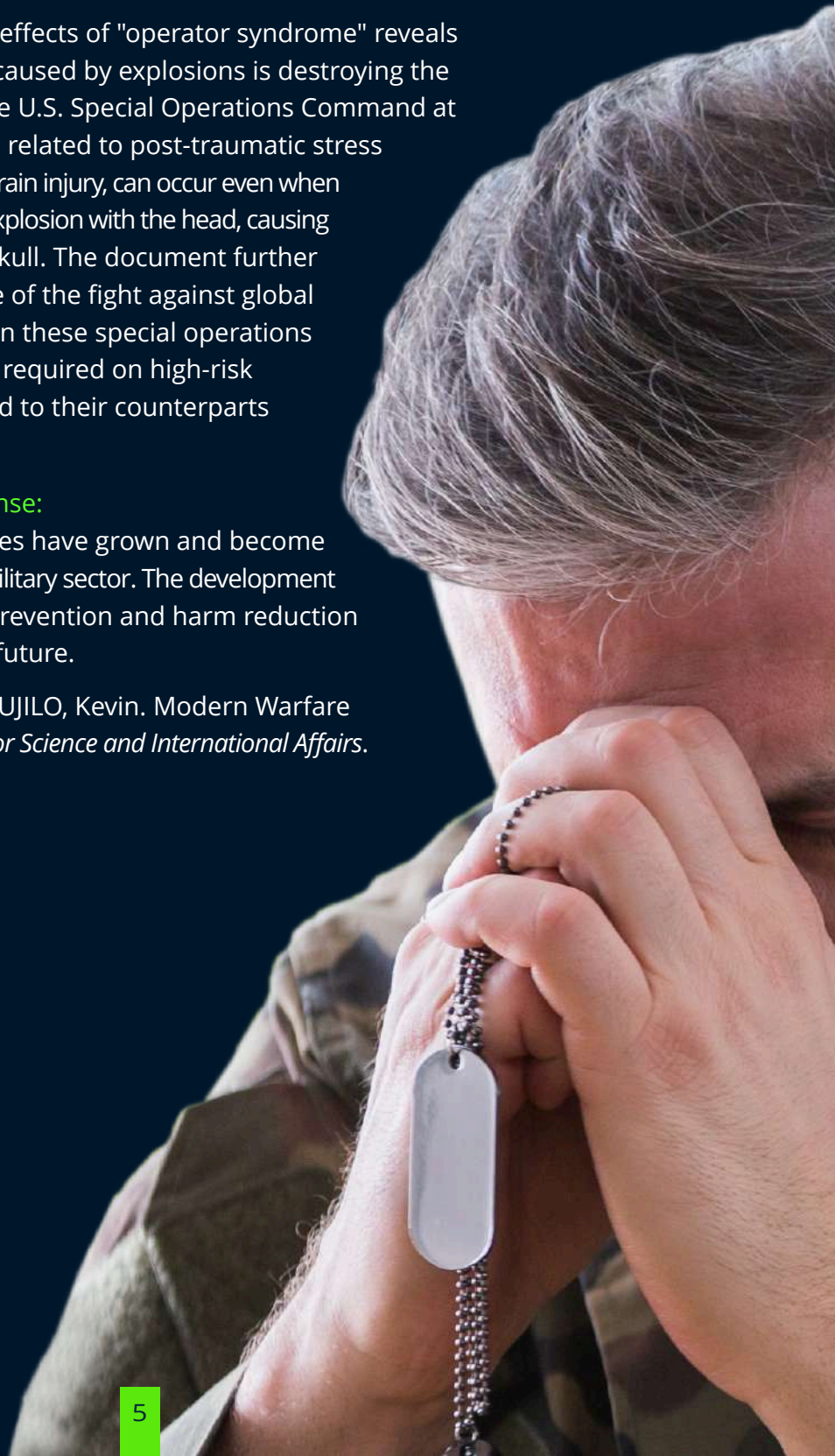
Thiago Jacobino Honório
MSc. (PPGEST/UFF)

A document investigating the effects of "operator syndrome" reveals that traumatic brain damage caused by explosions is destroying the lives of men and women in the U.S. Special Operations Command at an alarming rate. The disease, related to post-traumatic stress disorders and other types of brain injury, can occur even when there is no direct contact of the explosion with the head, causing internal displacement in the skull. The document further reveals that, due to the nature of the fight against global terrorism, military personnel in these special operations have been disproportionately required on high-risk combat and training compared to their counterparts in conventional force.

Impacts on Security and Defense:

Long-term brain-related injuries have grown and become a high-impact problem in the military sector. The development and investment in means of prevention and harm reduction may be highly relevant in the future.

Source: STEWART, Warren; TRUJILLO, Kevin. Modern Warfare Destroys Brains. *Belfer Center for Science and International Affairs*. <https://bit.ly/2SrZxs8>.



Narco-submarines serve as inspiration for North American maritime strategy

Jéssica Germano de Lima Silva
Doctoral Student (PPGEM/EGN)

Luisa Guimarães Vaz
Graduate Student (DGEI/UFRJ)

Inside the planning of the American Marine Corps, in a possible armed conflict against China, the solution to overcome a logistical problem came from an unusual element, international drug trafficking. In the context of maritime conflict, aiming to meet the needs of larger vessels, far from their logistical bases, the USA plans to maintain lines of communication for small units in hostile areas. The operational tactic is similar to that employed by international criminal groups involved in drug trafficking. These groups use “narco-submarines” - semi-submersible, manned, low speed and difficult to detect small vessels - to transport large quantities of cocaine from South America, to North America or Europe.

Impact on Security and Defense:

Currently, issues related to geopolitics, defense and security have complex, interdependent and non-traditional origins and developments, requiring answers that meet this level. In this sense, the Department of the Navy intends to develop discrete, relatively inexpensive, technologically advanced and unmanned semisubmersibles, equipped with armaments and sensors to supply combat material.

Source: MILLS, Walker D.; PHILLIPS-LEVINE, Dylan J.; FOX, Collin. “Cocaine Logistics” for the Marine Corps. War on the Rocks, July 22, 2020. <https://bit.ly/3illAv7>.



To get to know China, follow the trail of information

Samira Scoton
MSc. (PPGSID/ESG)

Daniel Vidal Perez
Dr. (DE/PUC-RJ)

China has declared war on influencers who eat on social media. It all started with President Xi Jinping's request that everyone "fight food waste". Soon after, another comment from the Chinese president unveiled the path of the real news that should be followed: China had to "maintain a sense of crisis in relation to food security". Since 2018, several disasters have undermined Chinese efforts in this regard. Any threat of disruption to food imports, like trade tensions with the Trump administration, exacerbates the risk of China's geopolitical and economic stability.

Impactos em Segurança e Defesa:

China has been experiencing an uninterrupted series of critical situations since 2018 that pose a serious threat to its food security: the African swine fever epidemic, the Covid-19 pandemic, the outbreak of the roundworm (*Spodoptera frugiperda* , JE Smith), as well as one of the worst floods in 40 years.

Source: TIDY, J. Por que a China declarou guerra a influencers que comem nas redes sociais. *BBC News*, August 21, 2020.

<https://bit.ly/2Gzu0A4>.

Chinese government sets new rules for selling technology

Lucas Pinheiro Fonseca
Graduate Student (IRID/UFRJ)

Walmor Cristino Leite Júnior
Master Student (PPGEM/EGN)

At the end of August, the Chinese government announced new rules for the export of technologies and can now prevent the sale of Chinese companies on the grounds of maintaining national security. Much of it is due to the specific case of the TikTok application, which has generated great controversy in North American territory, on charges of espionage. Apparently, China announced these measures as a response to threats by the US government to ban the application if it is not sold to American companies.

Impacts on Security and Defense:

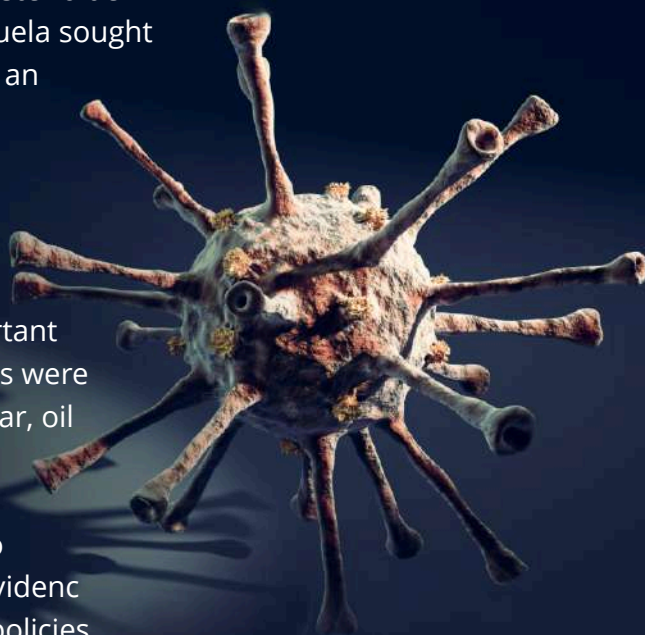
Measures of such an explicit character can generate tensions between States and hinder the interaction with foreign applications, since these applications have become objects of political dispute. The lack of transparency in the privacy and protection policies of these technologies can lead to geographical isolations from virtual environments.

Source: KHARPAL, Arjun. ByteDance says it will abide by tightened China export laws as TikTok sale looms. *CBS News*, August 30, 2020. <https://cbsn.ws/3jwBdRM>.

Prospective study evaluates post-pandemic Venezuelan society

Cesar Castello Branco Martins
Doctoral Student (PPGEM/EGN)

A prospective study recently published by the Ministerio del Poder Popular para Ciencia y Tecnología de Venezuela sought to characterize and represent the world system as an analytical basis to build an image of the destiny of the post-pandemic Venezuelan society, until 2025. In order to achieve it, the Structural Analysis tool was used, which, through consultation with specialists, defines variables that express the constituent elements of this system and are important for the creation of future scenarios. Twenty experts were consulted, and 32 variables were found, such as war, oil production, borders, bacteriological warfare, new world order, among others. Their degrees of influence and the cross-impact matrix were also analyzed. In a preliminary conclusion, there was evidence of scientific support for the formulation of public policies.



Impacts on Security and Defense:

Seeking to understand Venezuelan society in the near future, this prospective study allows not only to guide the actions focused on Science and Technology, but also to provide subsidies for the formulation of Defense and Security policies of the country.

Indicator:

Two indicators found in this study are the degree of motricity and dependence on the thirty-two variables identified in the analysis, which express the degrees of influence of these variables.

Source: HILLER, Grisel Romero; VALLES, Naistha Pérez; HERNÁNDEZ, Feibert. La sociedad pospandemia. Análisis estructural para escenarios futuros en Venezuela. *Observador Del Conocimiento*, Caracas, v. 5, n. 2, p. 76-90. May/Aug. 2020. <http://www.oncti.gob.ve/PostpandemiaVol5N2.pdf>.

Pandemic compromises public finances and worsens food insecurity

Alice Castelani de Oliveira
Master Student (PPGSID/ESG)

Daniel Vidal Pérez
Dr. (DQ/PUC-RJ)

The Covid-19 pandemic is affecting all four pillars of food security: availability, access, utilization and stability. The most important impact is found in the drop of the citizen's income, which puts access to food at risk. Agricultural systems heavily dependent on labor have also been affected by movement restrictions imposed by countries within and outside their borders. Before the outbreak of the pandemic, around 135 million people experienced acute food insecurity. From February to June 2020, that number increased by 45 million. By the end of this year, an estimated 265 million people will be in a situation of food insecurity.

Impacts on Security and Defense:

The food insecurity scenario may intensify social and political tensions, favoring the triggering conflicts. Extensive regions in Asia, Africa and some Latin American countries may become more vulnerable in the coming years, increasing the situation of global food insecurity, however, such a crisis could be an opportunity for food producing countries.

Indicators:

The indicators for the evolution of people in poverty and extreme poverty can be seen in the UN Hunger Map and data on world food production, at the WTO (World Trade Organization).

Source: SEIXAS, Mário Alves. Série diálogos estratégicos (NT34): Segurança alimentar pós-COVID-19: Megatendências dos sistemas alimentares globais. *Secretaria de Inteligência e Relações Estratégicas da Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA)*, 2020. <https://bit.ly/2HPsOuE>.



ABIN article addresses global trends for Defense by 2040

Carla Cristina Passos Cruz
Doctoral Student (IME/CCOMP/UERJ)

In 2018, the Brazilian Intelligence Agency (ABIN) released the article published in its magazine which was originally written in 2012, and addresses world trends and their reflexes in Brazilian defense. Despite being an article published eight years ago, the topic is very current since it discusses which reflexes, threats and opportunities would be possible to open up for the Defense sector in the future, based on two views. The first would be which image Brazil would like to represent in the international context, and the second would indicate to where humanity would go based on prospective analysis of scenarios for the world by 2040.

Impact on Security and Defense:

Studies of this kind help States to prepare for a reality of changes in the world balance of power. In this context, there could have a new configuration of actors with greater influence, resulting from competitions for regional or global protagonism. New dynamics, opportunities and risks could be created.

Source: COSTA, C. E. B. da. Tendências Mundiais e seus Reflexos para a Defesa Brasileira. *Revista da Agência Brasileira de Inteligência*. Brasília: Abin, n. 7, jul. 2012. <https://bit.ly/33uUSvI>.



www.projektoradar.com.br

