

# Quest

The Journal of Global Underwater Explorers



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**PHOTOGRAPHER  
PORTFOLIO:  
MARCEL WILKE**

**SAMPLE**

## **BATTLE OF THE CONVOYS**

Mapping maritime memories  
in the Southern Mediterranean

## **THE LAST SCOUT**

The amazing discovery of the  
WWI wreck HMS Nottingham

## **THE PRE-DIVE PROCEDURE**

GUE EDGE – the cornerstone of  
safe and efficient diving

## **DIALING IN THE DETAILS**

Trim and buoyancy are the key to  
mastering the elusive back kick

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# EDITOR'S LETTER

## DON'T LET THE STORIES RUST AWAY

**T**his issue of *Quest* takes you deep into the world of wreck exploration with two remarkable projects. On page 12, we follow the ongoing work documenting World War II wrecks from the Battle of the Convoys off the coast of Tunisia. And on page 38, you'll read about the discovery of the HMS *Nottingham*, a World War I wreck found in British waters.

Both projects require exceptional skill, experience, and teamwork. They bring together divers who are highly trained, disciplined, and able to work as part of tightly coordinated teams in challenging and often unpredictable conditions. The dives are deep, the locations remote, and the sites fragile—requiring careful handling at every stage. For those already working at this level, these expeditions are a powerful way to put hard-earned skills to work in preserving history. And for those aiming to get there, they're an inspiring example of what's possible with the right preparation and dedication.

On land, we have museums, monuments, and memorials—places where we preserve history through artifacts, photographs, rusted helmets, and the stories passed down through generations. But underwater wrecks are just as important. They're war memorials at sea, hidden from most eyes, their stories fading unless divers bring them back into the light.

The expeditions in this issue aren't just about mapping steel and logging GPS coordinates. They're about the people—sailors, soldiers, medics, civilians—who sailed on these ships. Many of their names aren't in history books, but their lives and sacrifices mattered just as much. The ocean hasn't forgotten them, and neither should we.

Documenting war wrecks isn't just archaeology—it's remembrance. Every hull explored, every artifact discovered, every identity confirmed helps piece together the human story of war. It ensures these sites aren't reduced to scrap metal or just another dive destination, but are honored as resting places and reminders of the cost of conflict.

We owe it to those who were there—and to those who come after—to protect these stories and share them. So if you feel that pull toward wrecks, take the next step. Get the training, join a project, lend your skills to an expedition or a project, or contribute to research from shore. There's a role for everyone in preserving this history. As you read these pages, I hope you'll think about the courage, the loss, and the part you can play in keeping their stories alive.

**Dive safe and have fun!**

**Jesper  
Kjøller**  
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More than a century after her sinking, HMS *Nottingham* has been found in the North Sea. This remarkably preserved WWI cruiser now resurfaces through deep dives, research, and the work of the ProjectXplore team.

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By day, Marcel is a financial advisor; beneath the surface, a passionate wreck diver and GUE Scientific Diver committed to conservation, research, and documenting history through international project work and underwater photography.

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GUE divers follow a standardized sequence before dives to minimize mistakes and equipment errors. This final safety check helps the team switch into dive mode, ensuring readiness and setting the stage for a successful, enjoyable dive.

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Cave survey is the art of measuring points relative to a surface reference, creating maps or models to locate caves and passages accurately, requiring skill and interpretation.





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COVER PHOTO  
STEFFEN SCHOLZ



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## HQ CORNER

# The GUE Projecte

## – and other resources

One of the most common questions from aspiring project divers is: “What are GUE Projects, and how can I get involved?”. The answer: “in more ways than ever before!”. Indeed, from the early days of the Woodville Karst Plain Project, project diving has been central to GUE’s identity. What began as a core principle—a path to exploration, conservation, and education via project diving—has evolved into a more structured and accessible system. GUE is building on its legacy of exploration by engaging the next generation, supporting both smaller, local initiatives and larger, high-impact missions. But regardless of scale, all projects need resources and support. From a new hub of project libraries to expanded materials and instructor tools, this article outlines the current offerings (and what’s next), within the agency.

**T**he GUE Project Portal landing site and the Project Library is the starting place to see current projects, past projects, and the very basics of how to get started from an applicant or manager perspective. Accessible from the main GUE.com website, this is a great first tool to refer all interested divers to, regardless of current level or ability. The landing page broadly consists of four main sections:

### 1. WHAT IS A PROJECT

An introduction to the DREAM initiative, the GUE Project definition, our why’s and values, and some featured projects.

### 2. PROJECT LIBRARY

The library contains a plethora of reports from 2016 to 2025.

### 3. HOW TO CREATE A GUE PROJECT

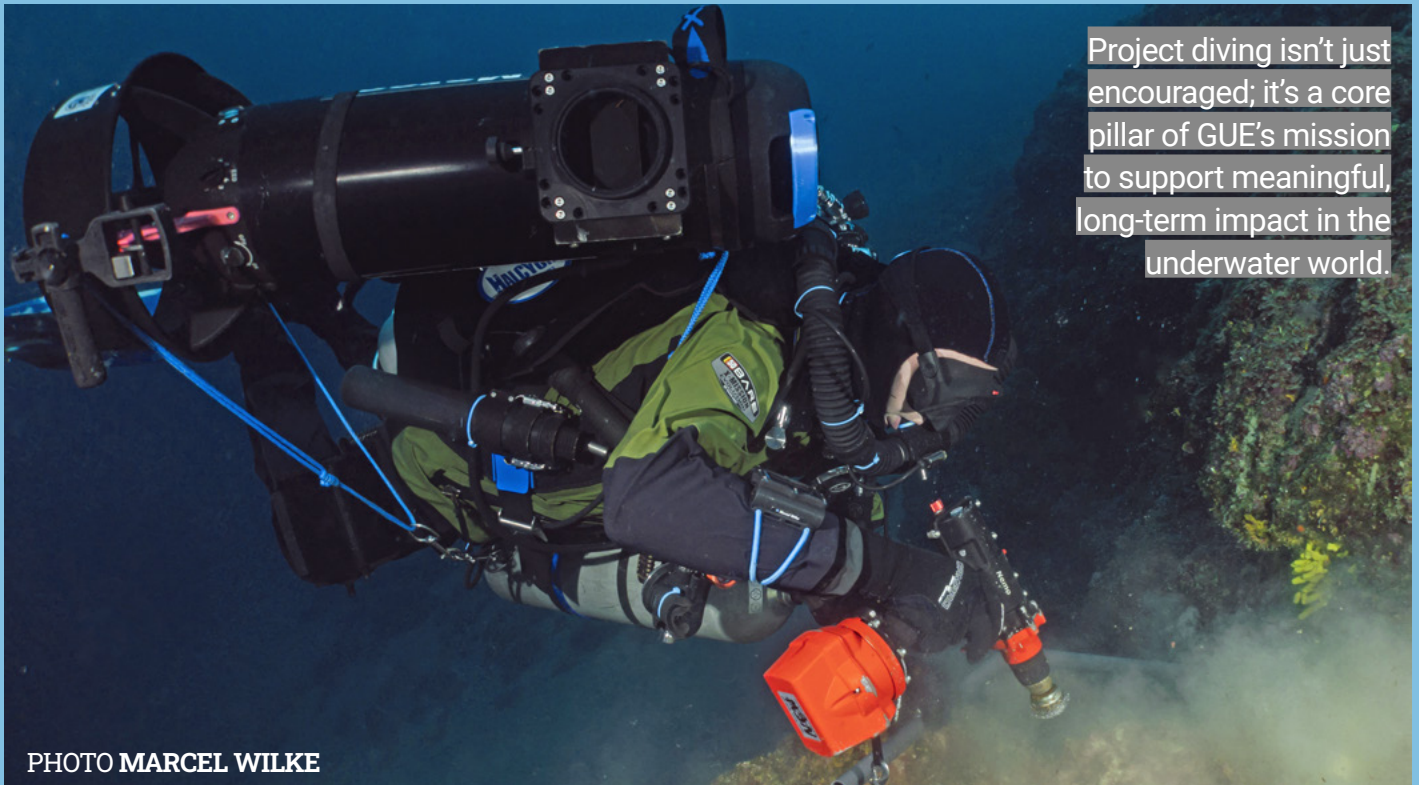
The first step-by-step guide to registration and where to find resources to help you start a project, including answers to frequently asked questions.

### 4. HOW TO JOIN A GUE PROJECT

Helpful pointers on how to create connections and links to the GUE Events calendar, Project Baseline, and the NextGen Legacy Project community for project and training inspiration.



# Project Portal



Project diving isn't just encouraged; it's a core pillar of GUE's mission to support meaningful, long-term impact in the underwater world.

PHOTO MARCEL WILKE

For the record, a GUE Project is defined as a goal-oriented scientific, educational, explorational, and/or conservational endeavor. Projects require a team of divers and support personnel who use advanced planning techniques, unique diving skills, and appropriate technology to realize the objectives. These activities may be recreational or focus on technical and/or cave skill sets.

## Project library

Over the past few years, the library of project reports (briefs) has expanded immensely, providing a place for past and current projects to be recognized. This has in turn seen an increase in first connections, participation, and engagement. Each brief can be separated into one of the four main categories:

- Exploration (including scouting, searching, and prospecting)
- Documentation (photo/video, survey, photogrammetry)
- Sample collection (data and/or specimens for scientific research)
- Conservation (beach cleanups, ghost net removals, planting sea grass)

Project briefs include a description of the project and its results, its current status (active/inactive, with any relevant dates), and a map showing the area of operation. Most important is letting others know how they can get involved in the project—this includes any necessary prerequisites, required experience levels, the project's location, and clear contact details.



## WHAT IS A GUE PROJECT?

A GUE Project is a goal-oriented scientific, educational, explorational, and/or conservational endeavor. Projects require a team of divers and support personnel who use advanced planning techniques, unique diving skills, and appropriate technology to realize their objectives. These activities may be recreational or focus on technical and/or cave skill sets. GUE Project goals should be defined within one or more of the following categories below.

For full information as to the definition of Projects, see GUE's v.1 of the [Project Definition Guide](#).

### EXPLORATION

Projects related to scouting and searching dives, with outputs such as reports, the discovery of new unexplored areas in underwater systems, and laying the groundwork for future iterations of projects.

Featured project: NEW 2025 - Ponderosa Resurvey Project

### DOCUMENTATION

Projects related to photography, videography and other media, with outputs such as survey materials, photogrammetry models, and mini documentaries as outreach materials.

Featured project: NEW 2025 - Uncovering the hidden reefs of Marine Park Bay, Tioman 2025

### SAMPLE COLLECTION

Projects related to scientific surveys, data collection and sample collections under permits, with outputs such as academic publications, reports for marine management, and evidence of species discovery.

Featured project: Measuring brain activity underwater with DAN

### CONSERVATION

Projects related to activities to protect the environment such as beach cleanups, ghost net removals, and seagrass planting, with outputs of ecosystem restoration, and preservation of aquatic areas.

Featured project: NEW 2025 - Ghost nets retrieval in Skånska Kattegatt

Accessible from GUE.com, the Project Portal is the starting point to explore projects and learn how to get involved—whether as a diver, project lead, or curious newcomer.

**Uncovering Hidden Reefs of Marine Park Bay, Tioman**  
GUE PROJECT BRIEF - 2025

**Project Objectives**

- Map all known and newly discovered reefs and underwater structures.
- Create a site map including the locations, depths, and topography of reefs, fish plots, and other points of interest.
- Use photogrammetry to generate 3D models of key structures.
- Record environmental and marine parameters, including water quality, sea temperature, and salinity.
- Record the size, abundance, and diversity of reef life.
- Record coral growth and reef progression.
- Record any signs of degradation or pollution from human activities.

**PROJECT STATUS:** ACTIVE

Contact: Gertjan Thissen and Jang Wang (Jang) | [gerjan@thissen.nl](mailto:gerjan@thissen.nl) | Location: Nibbi Bay, Tioman, Malaysia

**Measuring brain activity Underwater: DAN x DDD**  
GUE PROJECT BRIEF - 2024

**Project Objectives**

- Measure brain activity underwater using a portable EEG device.
- Investigate the effects of underwater environments on brain activity.
- Collect data for research on brain activity and cognitive function.

**PROJECT STATUS:** ACTIVE

Contact: Dan S. | [dan@dan.com](mailto:dan@dan.com) | Location: Various locations, including the Red Sea and the Mediterranean

**Retrieval of Ghost Nets in Skånska Kattegatt**  
GUE PROJECT BRIEF - 2025

**Project Objectives**

- Remove ghost nets from the Skånska Kattegatt area.
- Prevent ghost nets from harming marine life.
- Document the location and status of ghost nets.

**PROJECT STATUS:** ACTIVE

Contact: LVA | [lva@lva.se](mailto:lva@lva.se) | Location: Skånska Kattegatt, Sweden

## How to create a GUE Project

- Step 1** Defining an overview sets the scene for each project. This can comprise clarifying goals (measurable success criteria), taxonomy (recreational or technical GUE project type), and values (the "why"). A clear foundation helps Project Managers determine the required resources, team, and deliverables.
- Step 2** Planning follows. Whether using a Gantt chart or fixed project weeks with recruitment days, timelines must be mapped. Economic factors also play a role: is there grant funding, do you need to apply for support, or will participants cover costs for logistics, gear, and lodging? Equally important are the necessary permissions: scientific, archaeological, landowner, or filming permits depending on the site.

- Step 3** Registered GUE Projects benefit from visibility on the GUE site. By clicking on the event calendar form and registering the Project on the GUE Events page, it gives one access to increased engagement, visibility, and increased participants. In addition, when submitted, the project data is sent to HQ and to the Director of Dive Project Management (aka the author). In this way, I can keep track of the projects that are in development, those that have finished, and those that need support.

## 12 steps of project planning

After you have registered your project on the Project Portal on the GUE website (step 3), you will receive access to the Project Portal Manager resources.





By joining projects around the world, GUE divers strengthen their skills, build community, and contribute directly to exploration and preservation.

PHOTO MARCEL WILKE

## FACT FILE // INSTRUCTOR RESOURCES

For Project Managers who are also GUE staff or instructors, several grants and discounts are available on a plethora of different

software tools for project diving, accessible through GUE's nonprofit status. A selection of the tools and software is in development.

The resources themselves are a library of templates and guides designed to help you (the reader, or aspiring Project Manager) in all facets of project planning: from logistics and budget ideas to dive plans, report templates, outreach, and SOPs. Here, they are split into 12 steps of project planning—the first three of which are already listed above. Each of these 12 steps forms their own veritable library of resources from which divers can pick and choose to aid in their own project development. The result is the inception of a broad range of individual projects that are context-specific whilst still guided by the standards of excellence in conservation, education and exploration. The remaining steps (4-12) are defined below.

- **TEAM RECRUITMENT (4)** Building the right team goes beyond headcount. Consider how many divers are needed, how many dives each team will conduct, and, if applicable, boat capacity. Think through both the technical skill sets required, such as medical support, photogrammetry, or filming, and the soft skills like perseverance and strong teamwork that are critical for success.
- **MEDICAL & LIABILITY PAPERWORK (5)** This is essential for both legal compliance and diver safety. Make sure all participants complete the necessary forms.
- **STANDARD OPERATING PROCEDURES (6)** Following established procedures is crucial, especially when it comes to crisis response and risk management. GUE provides specific risk management plans and liability templates tailored to various types of events and projects.
- **LOGISTICS & TRAVEL (7)** Will participants travel together or individually? Is lodging fully catered, or will it be in remote conditions? Plan for how gear, oxygen tanks, or lithium batteries will be transported. Don't overlook on-site needs like compressors, drying areas, or access to tools and hardware.
- **MISSION PHASE PLANNING (8)** A weekly project timeline helps structure the mission, from daily briefings and dive prep to scouting, data collection, processing, and wrap-up. Build in flexibility for delays. Clear communication throughout the project is critical: use online meetings beforehand, hold on-site briefings on day 0, shakedown dives on day 1, and regular debriefs throughout.
- **DIVE PLANNING (9)** Each dive needs its own detailed plan, including gear and assigned roles for active project divers, support divers, and topside personnel.
- **DATA MANAGEMENT (10)** To avoid data loss and simplify reporting, set up a solid system for organizing, backing up, and tracking memory cards, photos, and wet-notes daily.
- **SOCIAL MEDIA & OUTREACH (11)** Develop a clear social media plan to showcase the project and support future funding opportunities. Always publish content with proper permissions and give credit to volunteers and collaborators.
- **DELIVERABLES (12)** Define and prepare your final outputs (which can be the Project Brief, videos, scientific papers, and more).



“ Since its inception, GUE has been rooted in exploration, with its founders applying their methods to elevate project diving globally.

## Future ideas

Since its inception, GUE has been rooted in exploration, with its founders applying their methods to elevate project diving globally. This group of individuals already knows how to organize, develop, and run projects, so the challenge now is to integrate and develop the next generation of divers into projects, and for them to continue pushing boundaries. Hence, GUE is promoting both large-scale, high-impact projects and encouraging entry-level initiatives that give newer divers meaningful ways to contribute from the start. Such initiatives include:

- **A Project Portal** to find projects and contact collaborators
- **Reports** that reflect a range of recreational and exploration diving
- **Project Resources** that guide aspiring Managers through the process,
- **Discounted software** that enables projects to analyze data

- **Engagement strategies** that promote all types of project diving across GUE platforms
- **Dedicated members** in HQ from whom aspiring project divers can solicit personalised support
- **Global projects** in which anyone can participate and contribute to data in a citizen science capacity

In a future issue, we'll explore the current and future developments of Project Baseline, a nonprofit that has been working since 2009 to explore, document, and protect the underwater world. As an initiative closely aligned with GUE's mission, Project Baseline mobilizes divers to record environmental change and collaborate with scientists, conservationists, and policy makers. It bridges grassroots engagement of projects with large-scale impact. ■

[www.gue.com/project-portal](http://www.gue.com/project-portal)




**Jenn Thomson**

Jenn was GUE'S NextGen Scholar for 2022-2023. She used the year to highlight the roles that recreational scuba can play in scientific operations, and to launch the NextGen Legacy Project. She joined GUE HQ soon after, first as a Global Projects Co-ordinator, and now part of the Executive Committee, leading the NextGen Program, managing the Dive Project department, and helping to expand

Project Baseline. She continues to work at the intersection of project diving, expedition vessels, and neutral buoyancy labs, connecting the space and marine sectors via scuba diving and exploration. And, after adamantly saying she never will for ~3 years, she has recently become a Tech 1 diver, and likes to collect bugs in caves.



TEXT **JESPER KJØLLER**  
PHOTOS **JESPER KJØLLER**

A full-page underwater photograph serves as the background. It depicts a diver in a blue wetsuit and a tank with 'NEVO' written on it, swimming towards a large, rectangular, heavily overgrown shipwreck structure. The water is a deep blue, and many small fish are visible in the upper portion of the frame. The diver is positioned on the right side of the image, facing left towards the wreck.

# CONVOY COWBOYS



An underwater photograph of a shipwreck, likely a cargo ship, heavily overgrown with coral and other marine life. The ship's structure, including its hull and what appears to be a superstructure with multiple windows, is visible. The water is a deep blue, and many small fish are swimming around the wreck. The overall scene conveys a sense of history and the passage of time.

# – *MAPPING MARITIME MEMORIES*







**Beneath the serene surface of the Mediterranean Sea off the coast of Tunisia lies a largely forgotten chapter of history—an undersea landscape marked by the remnants of World War II convoy battles. These shipwrecks are silent witnesses to a vital yet often overlooked naval conflict that shaped the outcome of the North African campaign. *Quest* Editor-in-Chief Jesper Kjøller chronicles the meticulous efforts to document and preserve these submerged sites, revealing their historical significance and honoring the men who risked everything to sustain the war effort. Through advanced underwater technology and dedicated research, ongoing projects uncover the enduring legacy of the Mediterranean convoys and the crucial role they played in the broader theatre of war.**



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**“The footage will feed the insatiable appetite of the photogrammetry model, slowly reconstructing the SS *Beatrice* in the digital realm.**

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**T**he lovely deep blue color enveloping us as we descend is a hue found only in the heart of the Mediterranean. It's almost mid-day, and the ocean above us is completely flat, a perfect mirror reflecting nothing but sky. We have “bonaccia,” the Italian term for dead calm.

We follow the thin, white shot line with the attached ribbons every 3 m/10 ft to make it more visible. By the time we reach 30 m/100 ft, the shadow of the massive SS *Beatrice* begins to reveal itself beneath us. She rests on her port side, remarkably intact despite the years.

Stefano, Faisal, and Thomas, who slipped beneath the surface 15 minutes before Rami and me, are already deeply immersed in their photogrammetry missions. Bright video lights fixed to their scooters pierce the twilight, casting glowing halos across the towering flanks of the sunken giant. The divers cruise alongside the wreck at staggered depths, maintaining precise distances as they methodically capture thousands upon thousands of high-resolution images—each frame a small piece of the puzzle. The footage will feed the insatiable appetite of the photogrammetry model, slowly reconstructing the SS *Beatrice* in the digital realm.

Below us, the seabed at 75 m/250 ft is a quiet chaos of debris and scattered cargo—mute evidence of the moment SS *Beatrice* was claimed by the sea after an air raid in 1941.

Rami spots an intriguing cargo hold and steers his scooter toward the large, square opening—like a giant barn door hanging open to the sea. I follow him inside, and we begin exploring the vast interior, scattered with rusting fuel drums.

After 35 minutes on the bottom, we reluctantly begin our ascent after scooting the entire 137 m/450 ft from the bow to the stern. The long decompression ahead offers ample opportunity for my thoughts to drift back in time to the desert war that claimed this ship and the hundreds of others now lying silent in these waters.

### **The Desert Fox**

The North African campaign of World War II, famously marked by the rivalry between Field Marshal Erwin Rommel and General Bernard Montgomery, was one of the most demanding and strategically complex theaters of the war. Fought between 1940 and 1943 across the deserts of Libya and Egypt, the “Desert War” was a test of endurance, mechanized warfare, and above all, logistics.

The extreme environment made every movement equipment-intensive. With open, featureless terrain, blistering heat, and fine sand that wreaked havoc on machinery, even basic operations became monumental tasks. Tanks, trucks, and artillery broke down regularly. There were no local resources to draw on—fuel, water, ammunition, and spare parts had to be shipped in from across dangerous waters.

For Rommel's Axis forces, that meant relying on convoys sailing from Italy across the Mediterranean. But these convoys were relentlessly hunted by Allied forces based on the island of Malta. Submarines, bombers, and fast-attack craft decimated Axis shipping, causing chronic shortages. Rommel, AKA the “Desert Fox” frequently pushed ahead of his supply chain, leading to daring maneuvers that dazzled but often stalled due to a lack of fuel and ammunition.



The Allies, by contrast, had more stable supply routes via the Suez Canal and the port of Alexandria. Though not without challenges, their lines were longer-lasting and better protected. Montgomery's leadership, beginning in 1942, brought a more methodical approach: no offensive began without a solid logistics base. This strategy paid off at the Second Battle of El Alamein, where Allied preparation and supply overwhelmed Rommel's weakened Afrika Korps. It marked a turning point in the campaign.

### **Underreported naval war**

Desert warfare, in many ways, resembled naval combat on land. Vast distances, minimal cover, and reliance on radio and reconnaissance gave battles a fluid, expansive character. Success depended on maneuver, coordination, and massing firepower at critical points—hallmarks of Montgomery's patient yet powerful strategy.

Yet, while tanks clashed in the desert, equally fierce battles raged at sea. Control of the Mediterranean was essential—whoever ruled the sea controlled the lifelines that kept desert armies alive.

Axis convoys sailed from Italian ports like Naples and Taranto to North African destinations such as Tripoli and Benghazi. Their mission was critical but perilous. Allied submarines and aircraft, operating from Malta, made the Central Mediterranean a deadly corridor. Fuel tankers and cargo ships were lost in alarming numbers—each sinking reducing the Afrika Korps' chances of survival.

To defend their supply lines, the Axis powers deployed warships and armed escorts. The Allies responded with daring naval engagements, surprise attacks, and stealth missions. Every ship that reached North Africa gave Rommel another chance; every loss brought him closer to collapse.

These fierce engagements left behind a haunting legacy beneath the waves. Shipwrecks litter the seabed from Libya to Malta—silent remnants of a brutal, underreported naval war.

Control of the sea wasn't a backdrop to the Desert War—it was its foundation. Without ships, there were no tanks, no food, no bullets. The desert victories depended on what hap-



Granma 2, our expedition vessel, is just large enough to support six divers—but with everything well organized, it performs admirably.



PHOTO JESPER KJØLLER

pened at sea. And the wrecks that remain today—still bearing the scars of war—remind us that behind every land battle, there was a supply chain, a convoy, and a crew who risked everything to keep the war machine running.

While the majority of war supplies did reach the armies on land, both sides suffered significant losses in the process. The eventual success of the Allied forces in North Africa was due in large part to their vastly superior industrial capacity—especially that of the United States—which ensured a steady flow of men, equipment, and ammunition. This logistical advantage proved decisive. Furthermore, the German high command prioritized the Eastern Front, limiting the support available to Rommel's Afrika Korps. This strategic decision, combined with overstretched supply lines and Allied control of the sea and air, contributed significantly to Rommel's eventual defeat.

## A game of Tetris


We're diving from *Granma 2*, a 13 m/42 ft cabin cruiser just large enough to support six divers,

so the team is handpicked with that limit in mind. Six is an ideal number: flexible enough to split into two teams of three or three teams of two, depending on the day's objective. The seventh member of the team is the heart of the operation—our skipper, cook, deckhand, and an exceptionally skilled CCR diver in his own right: Rocco Canella. His experience and calm presence are as essential as any piece of gear on board.

The boat is not initially designed for diving but with a few clever modifications, it does the job admirably. And compared to the assortment of fishing vessels used earlier in the project, it's a clear upgrade. Still, with the sheer volume of equipment needed to support six CCR divers—cameras, scooters, bailout tanks, drysuits, undergarments, and all the knickknacks of technical diving—it's a constant game of Tetris to keep everything in order. We keep the chaos under control and the boat is remarkably comfortable. And what it lacks in space, it makes up for in flavor. Rocco and Stefano, unfazed by the cramped galley and limited provisions, spoil us ►►




PHOTO JESPER KJØLLER

An underwater photograph showing a large school of silver fish, likely Atlantic mackerels, swimming around a large, dark, and heavily encrusted shipwreck structure. The water is a deep blue, and the scene is illuminated by natural light. The shipwreck structure is a large, vertical, rectangular piece of metal, possibly a part of a ship's hull or a large container, which is covered in various marine organisms and algae. The fish are swimming in various directions, some closer to the camera and others further away, creating a sense of movement and activity. The overall atmosphere is one of a thriving marine ecosystem despite the presence of human-made debris.

*Veloche* teems with marine life and lost nets and filaments litter the site, which endures ongoing fishing pressure from various methods and gear.





**“The expedition follows an established template: wait for a favorable two-day weather window, then depart at night so the 100-nautical-mile journey from Lampedusa to the wreck sites off the Tunisian coast can be completed while we sleep.**



PHOTO JESPER KJØLLER



PHOTO JESPER KJØLLER



daily with simple, delicious Italian meals. Their dishes—humble yet deeply satisfying—are a welcome comfort after long hours beneath the ocean.

The expedition follows an established template: wait for a favorable two-day weather window, then depart at night so the 100-nautical-mile journey from Lampedusa to the wreck sites off the Tunisian coast can be completed while we sleep. Once on site, we typically complete two dives per day before returning to shore to refill tanks, resupply, and prepare for the next two-day run.

## Gas management

Since we don't have the capacity to refill tanks at sea, a slightly different protocol has been developed over the years. The twin manifolded diluent tanks on the GUE-configured JJ-CCR units remain untouched during the dives. Instead, we feed the rebreather diluent from side-slung S40s routed through a switch block. In the event of a failure or if the drive gas runs low, it's

easy to switch to the onboard diluent, which is also accessible through the open-circuit regulators connected to the back-mounted tanks.

To preserve the precious 10/70 trimix drive gas, we also use what's commonly referred to as a "fourth bottle." This is mounted opposite the oxygen tank and contains air for inflating both wing and drysuit.

In a standard configuration, the wing is inflated via the right post of the back gas, and the suit from a separate inflation bottle, thus providing redundant buoyancy. However, inflating wings with trimix is a waste. But using the fourth bottle as the sole gas source for both inflation systems carries a significant risk—if that supply fails, the capacity to adjust buoyancy is completely lost. To mitigate this, we keep a backup inflation hose on the right post as a safeguard. But in an emergency, replacing the inflator hose under stress can be challenging. To address this, a dedicated switch block has been developed to simplify the process and enhance safety.



## FACT FILE // LAMPEDUSA

Lampedusa is the largest of the Pelagie Islands, located in the Mediterranean Sea roughly midway between Sicily and the North African coast. It is part of Italy's Sicily region but lies much closer to Tunisia than to mainland Italy. This strategic position has shaped Lampedusa's history, culture, and modern significance.

The island covers about 20 km<sup>2</sup>/7.7 mi<sup>2</sup> and hosts a population of approximately 6,000 residents. The community is small but diverse, consisting largely of locals whose livelihoods have historically depended on fishing and agriculture. Over time, the economy has shifted significantly towards tourism, which now plays a central role. The island is primarily frequented by Italian tourists, with very few international visitors. The island's population experiences seasonal fluctuations, with numbers swelling in the summer months when guests arrive.

Historically, Lampedusa's location made it a strategic military point, especially during

World War II. The island was occupied by Allied forces in 1943 as part of the campaign to control Mediterranean Sea routes and the southern approaches to Italy. Before and during the war, Lampedusa's proximity to North Africa meant it was a key observation and staging post for naval and air operations. Though the island itself saw limited combat, it served as a vital link in the logistics chain and as a refuge for ships and aircraft.

Today, remnants of wartime infrastructure such as bunkers and observation posts remain scattered across the island, offering tangible reminders of its strategic role during that global conflict.

In recent decades, Lampedusa has also become known as a major landing point for migrants crossing from North Africa to Europe, highlighting its ongoing geopolitical importance and humanitarian challenges.

Ferries from mainland Italy or Sicily operate daily, as do domestic flights from Palermo.

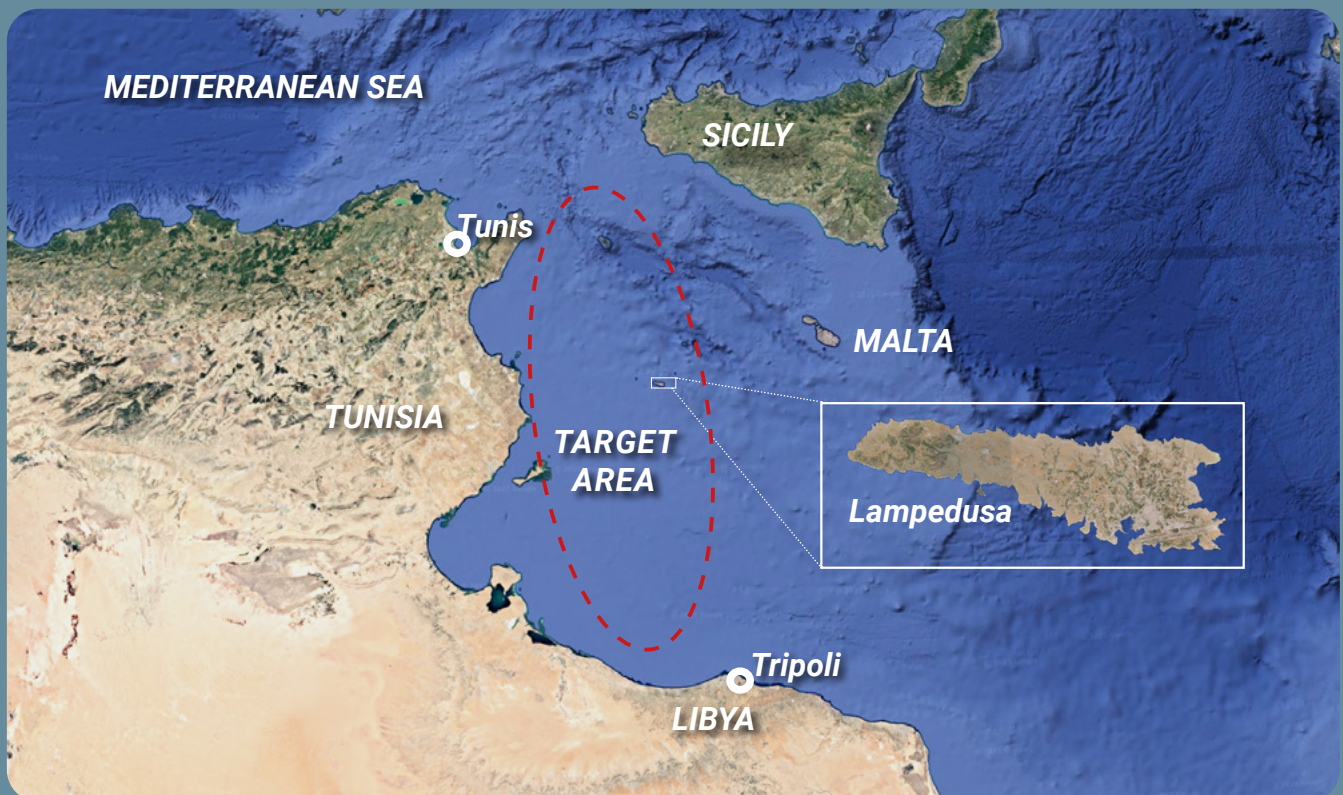
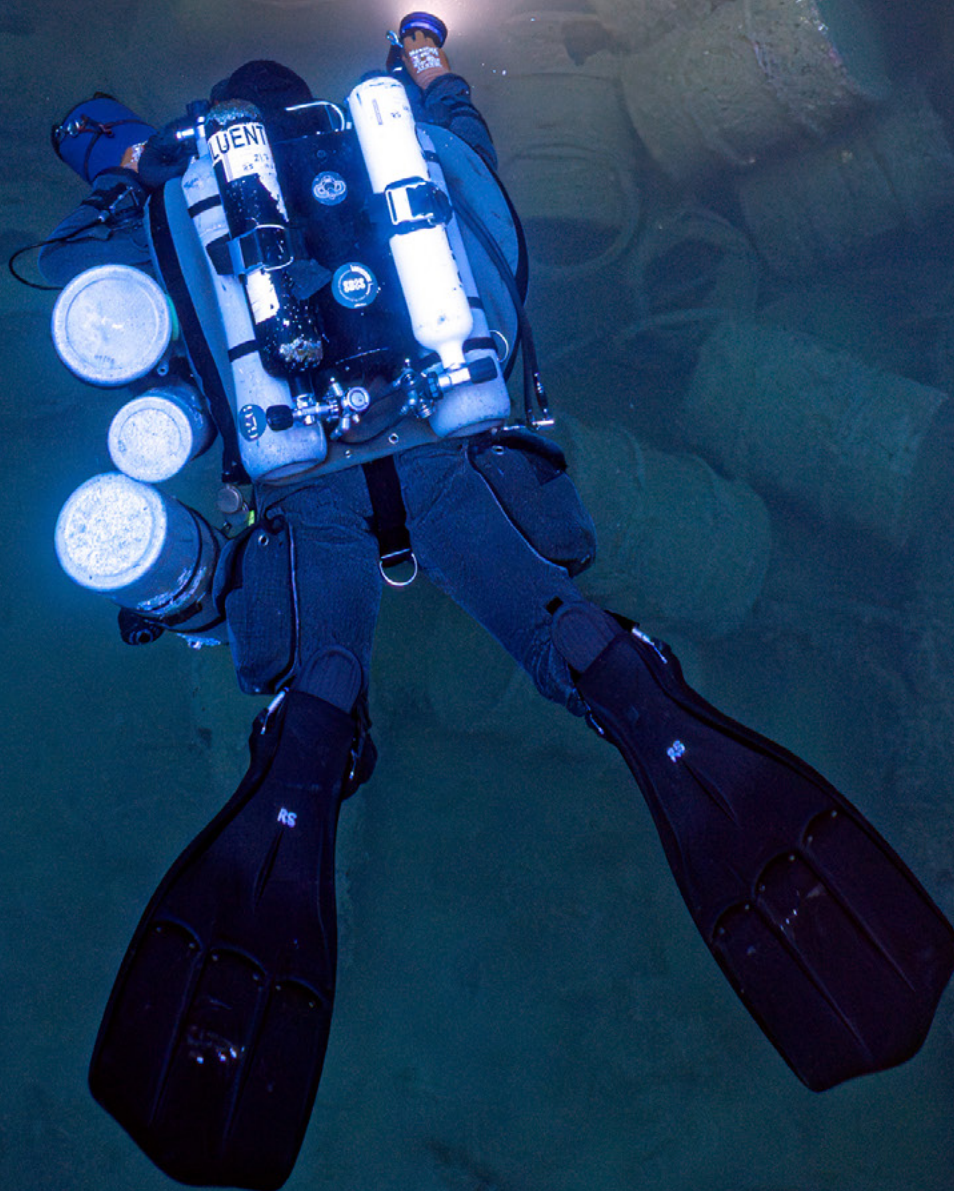




PHOTO JESPER KJØLLER

As the tanks deteriorate, millions of gallons of fuel trapped in these wrecks will eventually leak, creating a significant ecological threat.





Faisal examines a pair of 20mm flak guns resting in the cargo hold of the *Ingo*.

PHOTO JESPER KJØLLER



## The project

Launched by SDSS (*Società per la Documentazione di Siti Sommersi* or the *Society for the Documentation of Submerged Sites*) in the early 2000s, this ongoing project documents aircraft and naval wrecks linked to the WWII Battle of the Mediterranean Convoys. Its mission is to use the intrigue of these underwater sites to tell the human stories behind them—reviving a lesser-known chapter of history and honoring the tens of thousands from many nations who fought, suffered, and died.

These remote wrecks are extraordinary pieces of historical heritage. SDSS sees documentation as a crucial first step toward protection, ensuring natural decay isn't worsened by human activity. In Sicily and its surrounding islands, this work is carried out with the support of the Sicilian Region's

Superintendence of the Sea and the Museum of the Sea in Palermo.

Local fishermen from Lampedusa, Sicily, and Tunisia have been vital partners. While often unaware of the wrecks' identities, their knowledge of the seafloor—where fishing nets snag or marine life gathers—has been key in locating the wreck sites.

**“Local fishermen from Lampedusa, Sicily, and Tunisia have been vital partners. While often unaware of the wrecks' identities, their knowledge of the seafloor—where fishing nets snag or marine life gathers—has been key in locating the wreck sites.**


GUE Instructor Mario Arena is one of the driving forces behind the project. He is a passionate underwater explorer and historian whose knowledge of the region, tireless curiosity, and deep respect for maritime history have helped transform scattered wrecks into compelling

historical narratives. Through his leadership—and in collaboration with public institutions—the project has become far more than a research initiative. It now generates exhibitions, educational programs, digital archives, and immersive experiences that bring history to life.

Rami at the bow of the Italian merchant ship *Marin Sanudo*, resting at 75 m/246 ft. She was carrying aircraft engines and parts, trucks, motorcycles, helmets, and shoes.





A full-page background image showing a diver in blue water next to a large, rusted metal structure, likely a shipwreck. The diver is wearing a blue BCD, a black mask, and a black fin. A large blue cylinder with the number '57' is attached to the diver's gear. The water is a deep blue, and the structure is dark and textured.

“Sharing these stories with a wider audience is not only a privilege but a responsibility—to keep the legacy alive and to inspire others to value and protect this extraordinary underwater heritage.”

PHOTO JESPER KJØLLER

Having ample time during the long decompression stops provides an opportunity to reflect on the historic significance of these wrecks, forgotten by most.



**Jesper Kjøller**



Jesper began his professional life as a musician but discovered his passion for diving over 30 years ago. He changed careers, becoming a diving instructor in 1994 and a PADI Course Director in 1999—the same year he took on the role of editor for the Scandinavian diving magazine *DYK*. He became a GUE instructor in 2011, and in 2015, relocated to Dubai to bring his talent for underwater storytelling and imagery to Deep Dive

Dubai as the facility's Marketing Manager. From his base in Dubai, Jesper travels the globe to teach, contribute to international dive publications, and take part in exploration projects such as the *Mars* field studies in the Baltic Sea, deep wreck exploration in the UAE and Egypt, or the Battle of the Convoys project in the Southern Mediterranean. In 2021, he became Editor-in-Chief of *Quest*, GUE's member journal.



## FACT FILE // TEAM

*Left to right:*

Jesper Kjøller, Denmark/UAE

Thomas Solberg, Norway

Rami Shakarchi, Switzerland/UAE

Stefano Gualtieri, Italy

Rocco Canella, Italy

Faisal Khalaf, Lebanon/Egypt

Mario Arena, Italy (not pictured)



Mario is especially passionate about three long-term goals. The first is increasing public awareness in Italy, particularly by integrating this largely underexposed piece of history into schools and educational curricula. The second is facilitating the development of a sustainable dive tourism industry in Tunisia, where many of the wrecks lie within reach and could form the foundation of a culturally rich and economically valuable heritage tourism sector.

The third goal focuses on creating awareness of a looming environmental threat beneath the waves—millions of gallons of fuel trapped in these wrecks will eventually leak as their tanks deteriorate, posing a serious ecological risk.

### **Keeping the stories alive**

Being part of this project has been both a meaningful experience and a rare opportunity to connect with the history hidden beneath the

waves and to honor the lives entwined with these wrecks. I'm grateful to contribute to the preservation of this maritime legacy and look forward to returning to continue this important work alongside others equally committed to the cause.

Sharing these stories with a wider audience is not only a privilege but a responsibility—to keep the legacy alive and to inspire others to value and protect this extraordinary underwater heritage. Through exploration and storytelling, we help ensure that the sacrifices of the convoy crews and the lessons of the past are never forgotten. ■

### RESOURCES

[sdss.blue](https://sdss.blue)

[underwaterhistory.org](https://underwaterhistory.org)

### SPECIAL THANKS

Pelagos 2.0 Diving Center Lampedusa

[www.pelagoslampedusa.it](https://www.pelagoslampedusa.it)

# GUE PREMIUM DIVE CENTERS

**Area 9 Mastery Diving – Kralendijk, Bonaire**

➔ [www.masterydiving.com](http://www.masterydiving.com)



**Base1 – Sardinia, Italy**

➔ [www.baseone.it](http://www.baseone.it)



**Deep Dive Dubai – Dubai, UAE**

➔ [www.deepdivedubai.com](http://www.deepdivedubai.com)



**Dive Centre Bondi – Bondi, NSW, Australia**

➔ [www.divebondi.com.au](http://www.divebondi.com.au)



**Duikcentrum de Aalscholvers – Tilburg, Netherlands**

➔ [www.aalscholvers.nl](http://www.aalscholvers.nl)



**Eight Diving – Des Moines, WA, USA**

➔ [www.8diving.com](http://www.8diving.com)



**Exploration Diver – Hangzhou, China**

➔ [www.facebook.com/qiandaolake](https://www.facebook.com/qiandaolake)

**Extreme Exposure – High Springs, FL, USA**

➔ [www.extreme-exposure.com](http://www.extreme-exposure.com)



**Islas Hormigas – Cabo de Palos, Spain**

➔ [www.islashormigas.com](http://www.islashormigas.com)



**Living Oceans – Singapore**

➔ [www.livingoceans.com.sg](http://www.livingoceans.com.sg)



**Scuba Academie – Vinkeveen, Netherlands**

➔ [www.scuba-academie.nl](http://www.scuba-academie.nl)



**Tech Korea – Incheon, South Korea**

➔ [www.divetechkorea.com](http://www.divetechkorea.com)





## Third Dimension Diving – Tulum, Q. Roo, Mexico

➔ [www.thirddimensiondiving.com](http://www.thirddimensiondiving.com)



## Zero Gravity – Quintana Roo, Mexico

➔ [www.zerogravity.com.mx](http://www.zerogravity.com.mx)



# GUE DIVE CENTERS

## Buddy Dive Resort – Bonaire

➔ [www.buddydive.com](http://www.buddydive.com)



## Dive Alaska – Anchorage, AK, USA

➔ [www.divealaska.net](http://www.divealaska.net)



## Faszination-Tauchsport – Sauerlach, Germany

➔ [www.faszination-tauchsport.de](http://www.faszination-tauchsport.de)



## Dive in Essen – Essen, Germany

➔ [www.dive-in-essen.de](http://www.dive-in-essen.de)



## KrakenDive – Tossa de Mar, Spain

➔ [www.krakendive.com](http://www.krakendive.com)



## Living Oceans Malaysia – Kuala Lumpur, Malaysia

➔ [www.livingoceans.com.my](http://www.livingoceans.com.my)



## Moby Tek Dive Center – Pahang, Malaysia

➔ [www.moby-tek.com](http://www.moby-tek.com)



## Paragon Dive Group – Arizona, USA

➔ [www.paragondivestore.com](http://www.paragondivestore.com)



## Plongée Nautilus – Quebec City, QC, Canada

➔ [www.plongeenautilus.com](http://www.plongeenautilus.com)



## Scuba Adventures – Plano, TX, USA

➔ [www.scubaadventures.com](http://www.scubaadventures.com)



## Scuba Seekers – Dahab, Egypt

➔ [www.scubaseekers.com](http://www.scubaseekers.com)





## Tauchservice Münster – Münster, Germany

➔ [www.tauchservice.info](http://www.tauchservice.info)



## Tech Asia – Puerto Galera, Philippines

➔ [www.techasia.ph](http://www.techasia.ph)



## Unique Diving Center – Shanghai, China

➔ [www.uniquediving.cn](http://www.uniquediving.cn)



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Additional benefits include:

		Platinum \$1,000 \$1200+ in perks		
Limited edition Platinum member-only jacket		✓		
Free admission to the biennial GUE Conference for each year of membership		Gold \$350 \$600+ in perks		✓
Free access to GUE PDF books; discount on GUE's DecoPlanner 4 software		50%	FREE!	
Free registration for all GUE classes for the duration of your membership (intern registrations not included)		Silver \$150 \$200+ in perks	*Limit Two	✓
Discount on GUE.tv, GUE's video learning site designed to educate and inspire divers of all training levels	50% OFF \$150 Value	FREE! \$300 Value	FREE! \$300 Value	
Personalized GUE gear stickers	5 Small 5 Large	10 Small 10 Large	20 Small 20 Large	
Member-exclusive mask strap with monochrome GUE logo	✓	✓	✓	
Free high-quality, annual member t-shirt; receive a new shirt with every renewal!	✓	✓	✓	
Free access to all current GUE course presentation materials (PDFs)	Conservation \$39	✓	✓	✓
Your membership helps support conservation initiatives, including Project Baseline	✓	✓	✓	✓
Discount on GUE Store purchases	5%	10%	15%	25%
Quest PDF: GUE's quarterly online journal	Quest	Quest	Quest	Quest
Subscription to GUE's private Quest mailing list	✉	✉	✉	✉
Access to GUE training supplements and procedural manuals	✓	✓	✓	✓