

Exploring WWII Relics of the Marshall Islands



Dave & Sherry McCampbell
www.SVSoggypaws.com/Presentations

Update 6-3-15

Introduction

- **Started w/ slow cruising circumnavigation.**
- **Fathers both career Naval aviators.**
- **Interest in Scuba diving, shipwrecks and aviation.**
- **More remote N rather than S Pacific route to PI.**
- **Start of Tom's book coincided w/ start of our trip N**
- **Our arrival in Majuro, RMI same date, 10 May, as Dave's Dad's arrival in Majuro 69 years earlier.**
- **Got better and better as we went along.**
- **Total of almost 2 years exploring S Micronesia, RMI, FSM to Palau.**

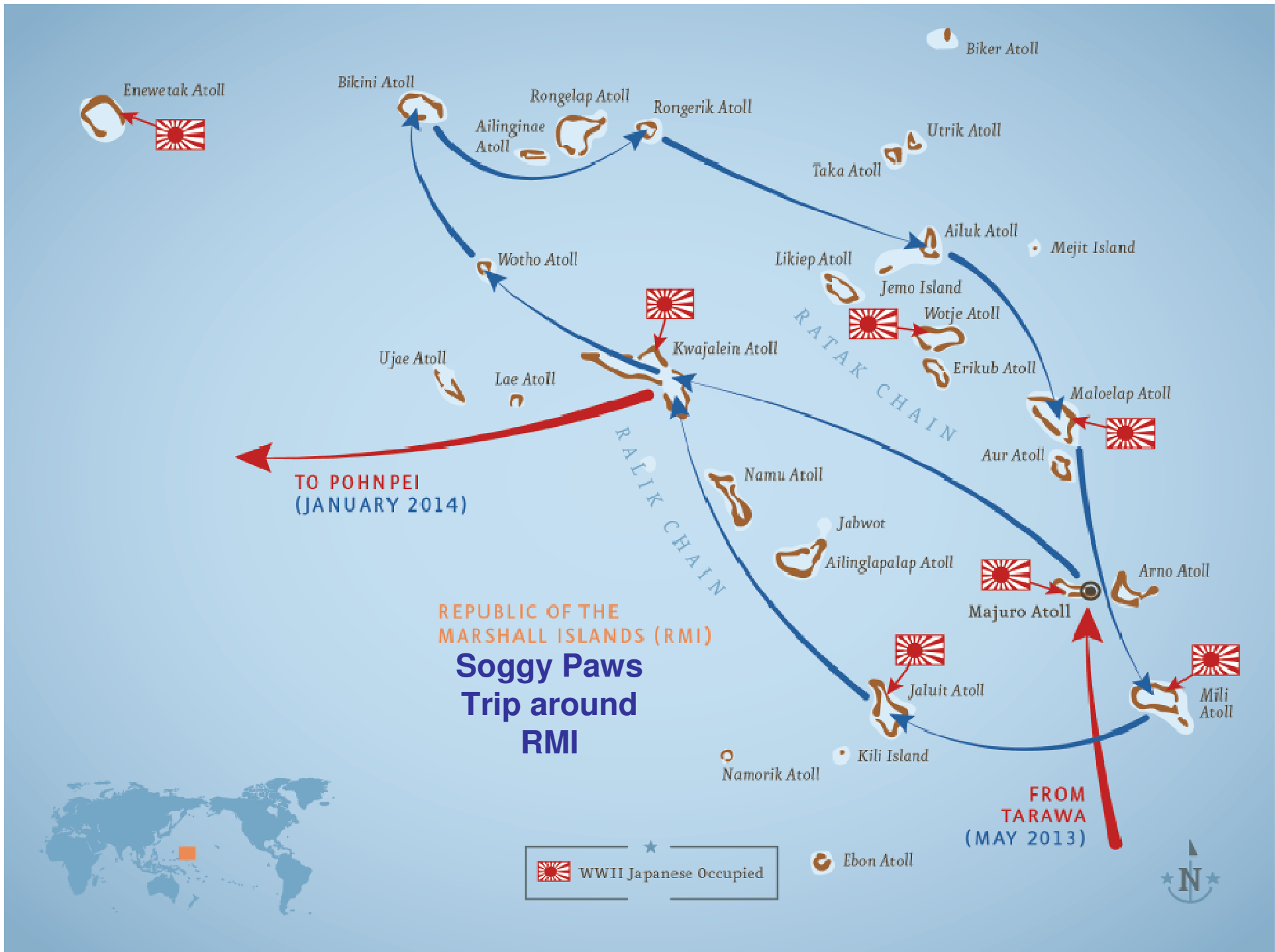
A6M Zero
engine

**Sherry sez: where are we
and what the heck is this?**



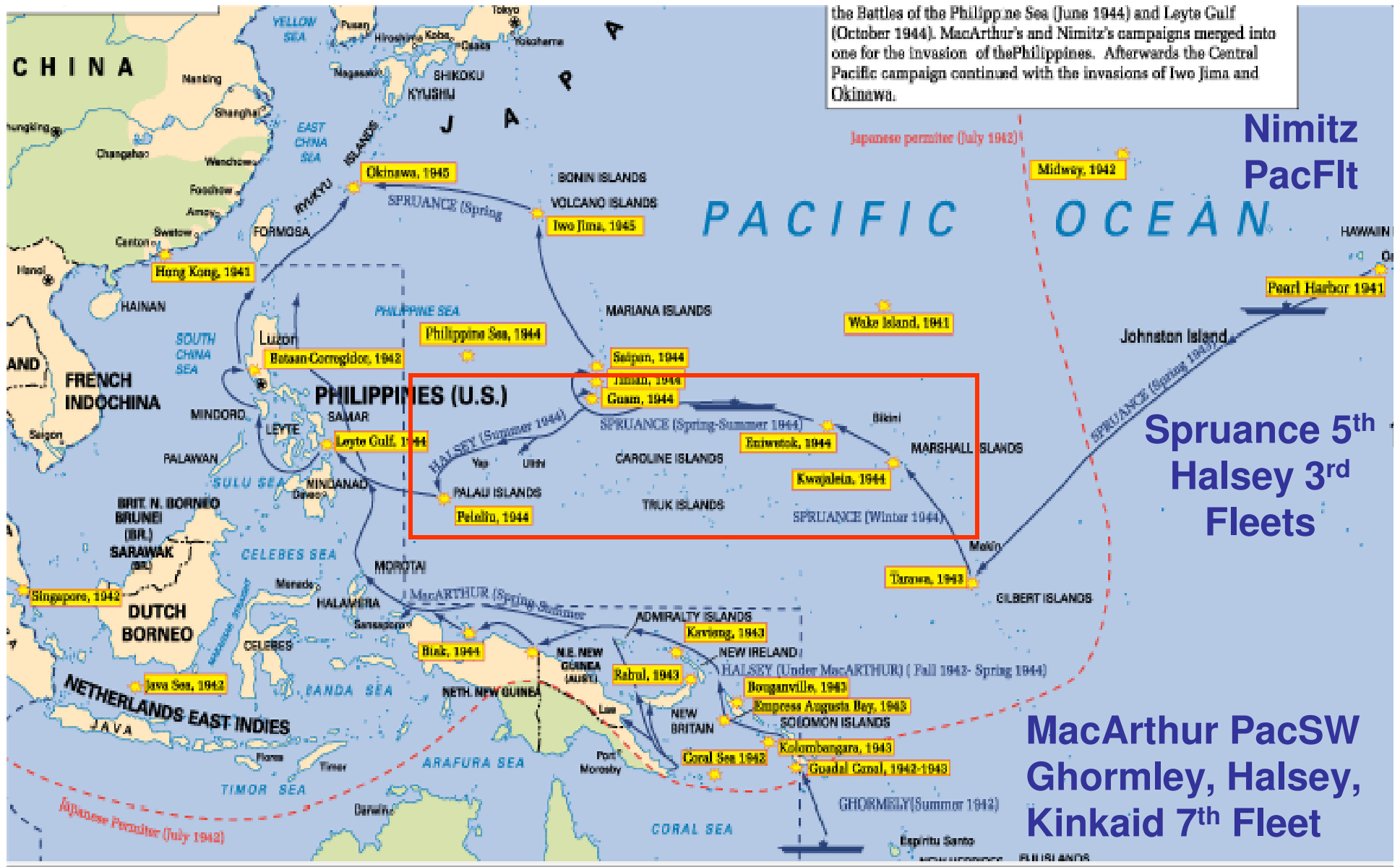
SV Soggy Paws Florida to the Philippines





World War II Pacific Theater 1941-45

Fleet Tracks/Major Assaults



2013-4 S/V Soggy Paws Trip

- Fiji thru Marshalls & FSM to Palau
- Places we stopped w/ WWII relics:

*RMI

= Majuro
= Kwaj/Roi
= Bikini
= Maloelap
= Mili
= Jaluit

*FSM

= Pohnpei
= Satawan/Mortlocks
= Chuuk/Truk Lagoon
= Puluwat/Alet
= Woleai
= Ulithi
= Yap

*PALAU

=Peleliu

*TARAWA

Short Marshall Islands History

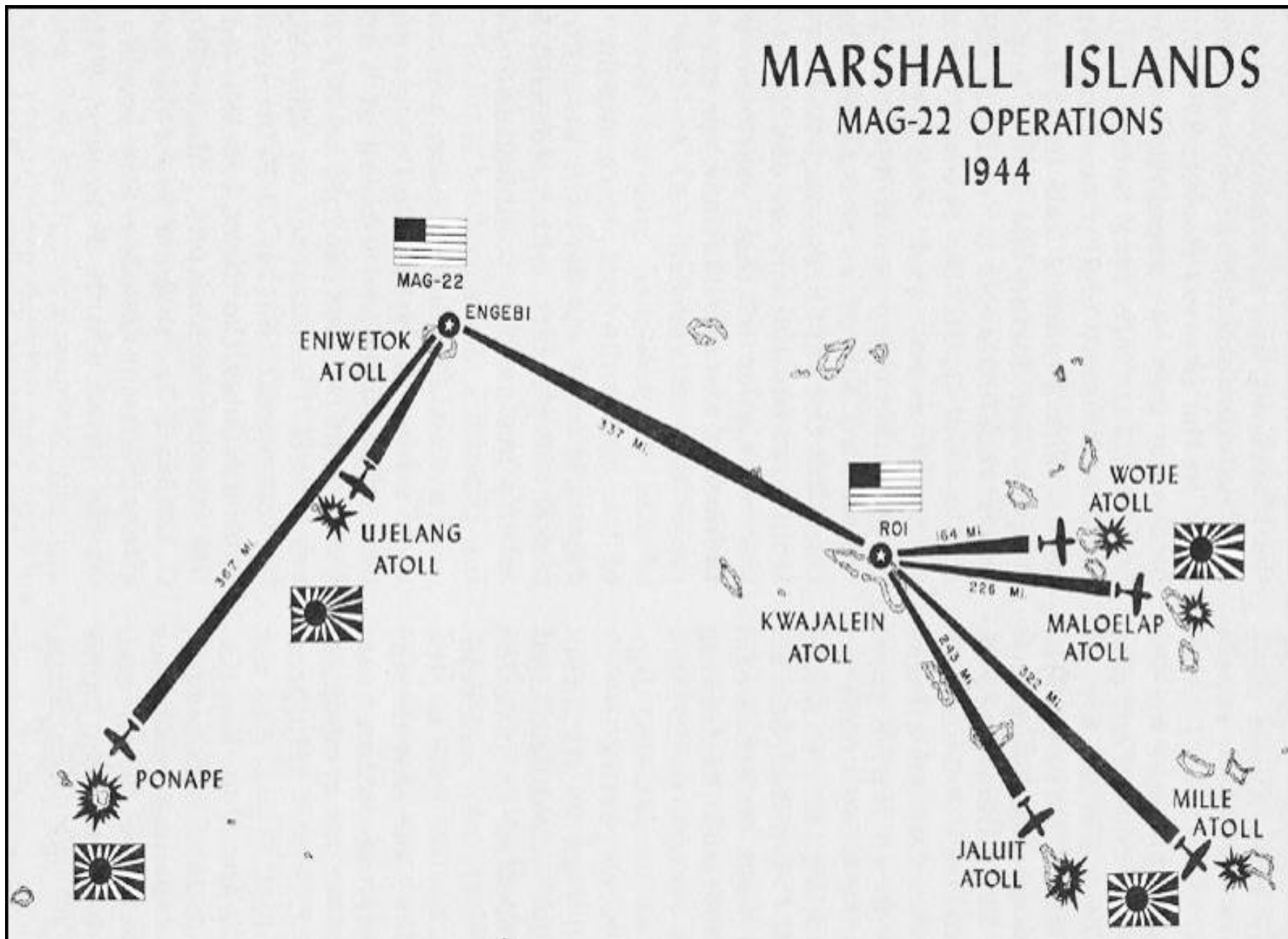
- **Prehistory- Micronesian**
- **1880s-1915 - German**
- **1915-1945 - Japanese**
 - Heavy infrastructure construction, fortification
- **1943/44 - Major U.S. bombing campaign**
 - Landings Kwaj, Majuro
- **1946-50 – Nuclear bomb testing**
 - Bikini/Eniwetok Atolls
- **1945-1986 - U.S. Trust Territory**
- **1989 RMI Independence**



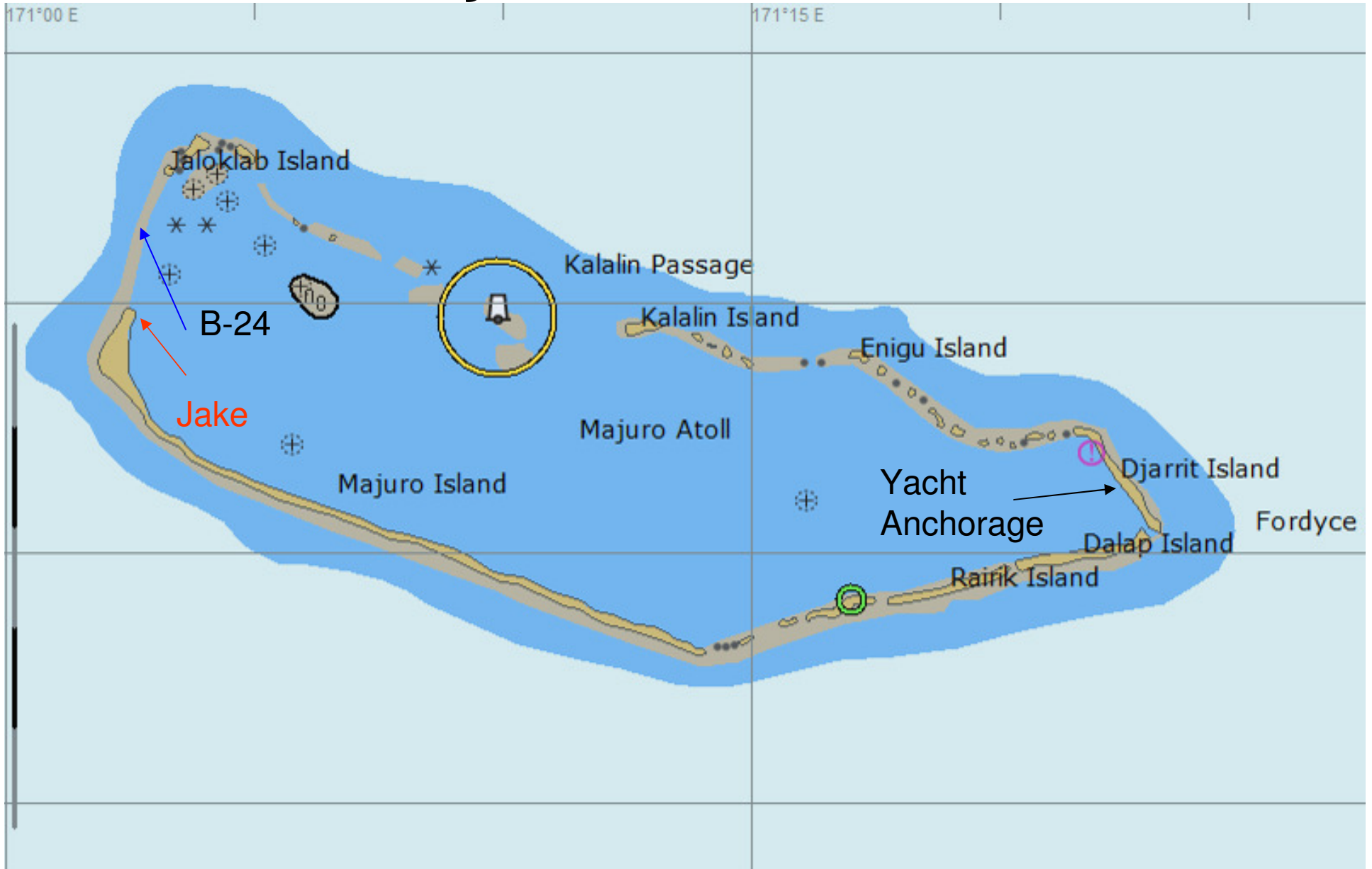
RMI Islands During WWII

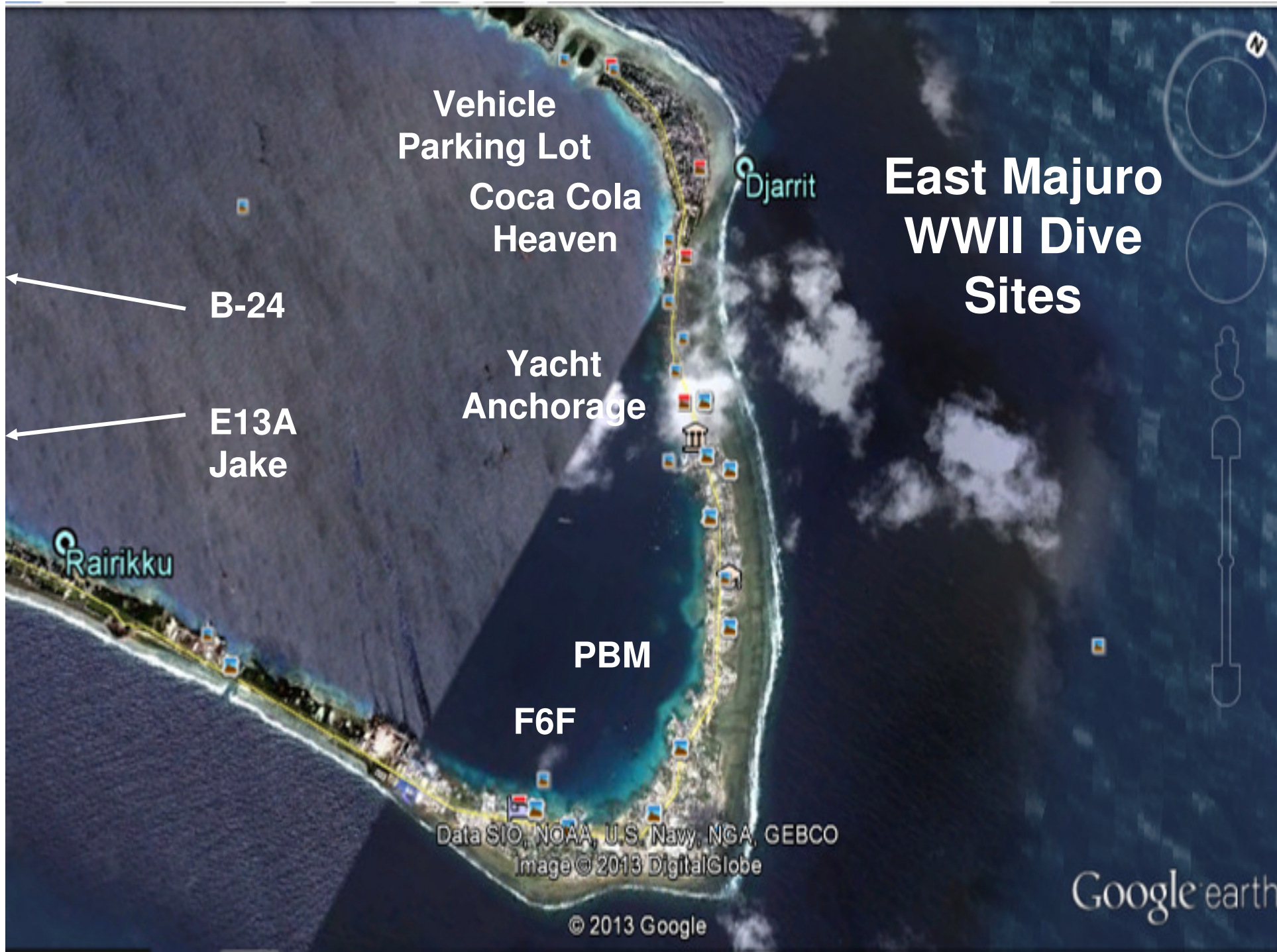
- Majuro Atoll - deserted before US landing
- Kwajalein Atoll - US landings opposed on Roi/Kwaj in Jan/Feb 44, became US air base
- Maloelap Atoll - Taroa Isl big Jap air base
- Mili Atoll - Mili Isl big Jap air base
- Jaluit Atoll - Navy headquarters, Emijay Island major Jap sea plane base
- Wotje Atoll - major Jap sea plane base
- Bikini Atoll - US nuclear testing after WWII

US Attacks on RMI/FSM 1944-45



Majuro Atoll Chart





Vehicle
Parking Lot
Coca Cola
Heaven

East Majuro WWII Dive Sites

B-24

E13A
Jake

Yacht
Anchorage

PBM

F6F

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2013 DigitalGlobe

© 2013 Google

Google earth

Fifth Fleet Ships at Majuro Atoll May 44

7 CVs - 3 Independence, 4 Essex, Enterprise (RF), 3 BBs, etc
(Dad aboard Essex CV-9)



WWII Aircraft Production 1941-44

• Japan	58,822
• Germany	92,656
• USSR	116,365
• Total Above Countries	267,843
• US	261,826

B-24 Liberator 'BabySandy II'



www.underwaterphotography.com/Dive-Sites/Dive-Site.aspx?ID=2826

Grumman F6F-5 Hellcat Fighter

1 pilot,
2000hp,
380mph,
1040mi,
38k',
2x20mm,
4x50cal,
bombs,
rockets,
12,275 ea

'Minsi III'
McCampbell, Oct 1944

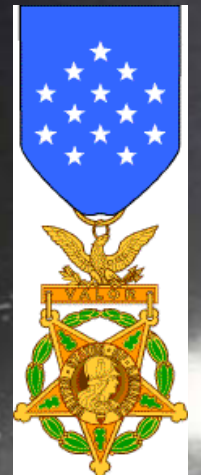


Onboard USS Essex CV-9 in the Pacific Nov 1944



AMC Chester Owens
Crew Chief

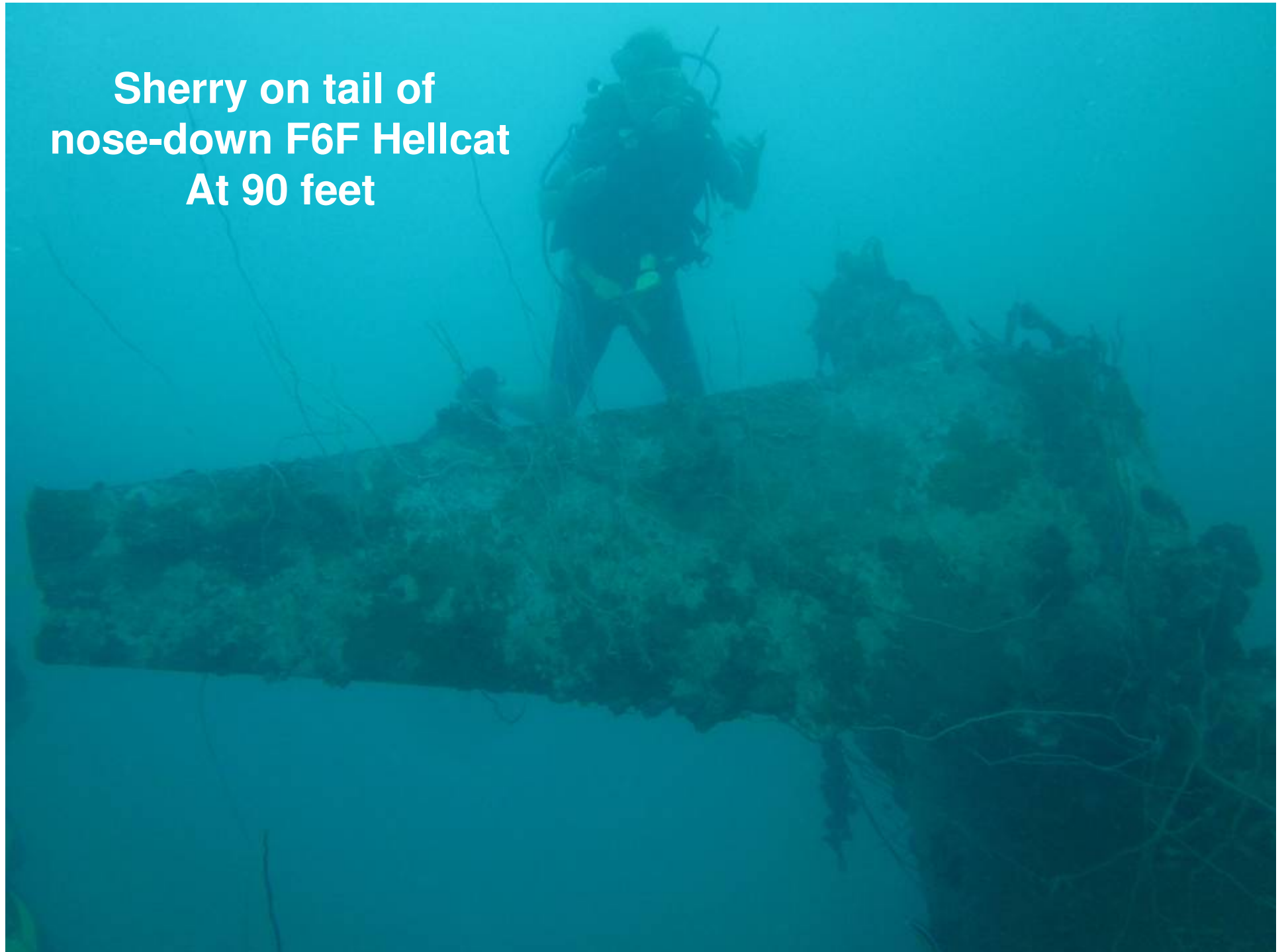
Cdr David McCampbell
US Navy's Leading Ace

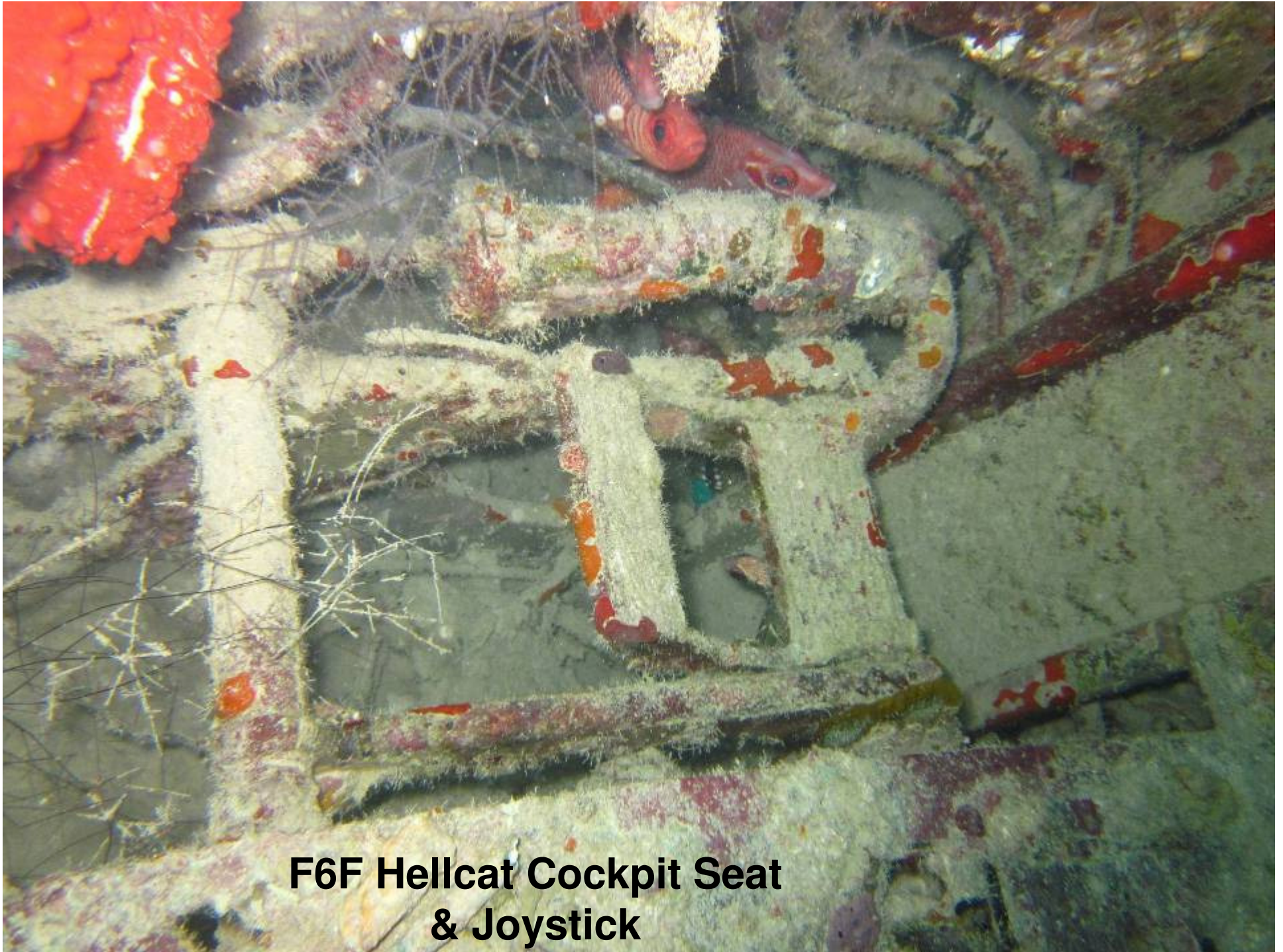


AG-15 in the Pacific Sep-Nov 44

- Eniwetok reprovision 3 Sep 44
- Palaus strikes 6 Sep
- Mindanao strikes 9 Sep
- Viscayas strikes Mid Sep
- Leyte strikes Mid Sep
- Manila, Luzon strikes 21 Sep
- Ulithi (replenish) 28-9 Sep
- Okinawa strikes 1st wk Oct
- Formosa strikes 10-5 Oct
- Ulithi (replace aircraft) 17 Oct
- Leyte (landings support) 18 Oct
- NE Luzon (Ozawa fleet strikes) 24-5 Oct
- Philippines strikes (25% losses) 5-14 Nov
- Ulithi (departure for US) 19 Nov

**Sherry on tail of
nose-down F6F Hellcat
At 90 feet**





**F6F Hellcat Cockpit Seat
& Joystick**

Martin PBM-5 Mariner Sea Plane



The “Parking Lot”

Lots of 1940s/WWII vehicles





**Sherry and a
fuel tank truck**



**Fuel truck front
end and hose reel**



**Truck front end w/
intact radiator and
headlights**



**Fire truck w/ ladder
and bench seats**

Coca Cola Heaven

An underwater photograph showing a vast seabed covered with hundreds of glass bottles. The water is murky and greenish, and the seabed is sandy and covered in silt. The bottles are scattered across the entire scene, with some appearing to be Coca-Cola bottles and others beer bottles. The lighting is dim, highlighting the texture of the sand and the shapes of the glass.

Beer
Bottle

Hundreds of 1944-5 dated
overseas Coke bottles



1940s Class 7 Singer
sewing machine, USN
ship standard issue

Kwajalein Atoll

Roi-Namur
Plane Graveyard
Roi
Jap/US base

Eru

Kwajalein Atoll

Planes & Shipwrecks

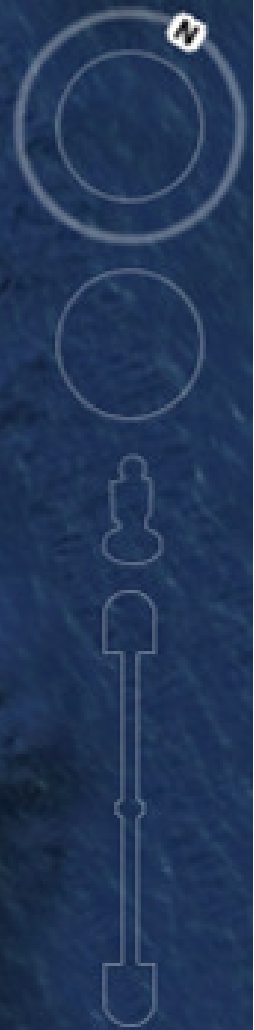
Ennylabegan

Bigej

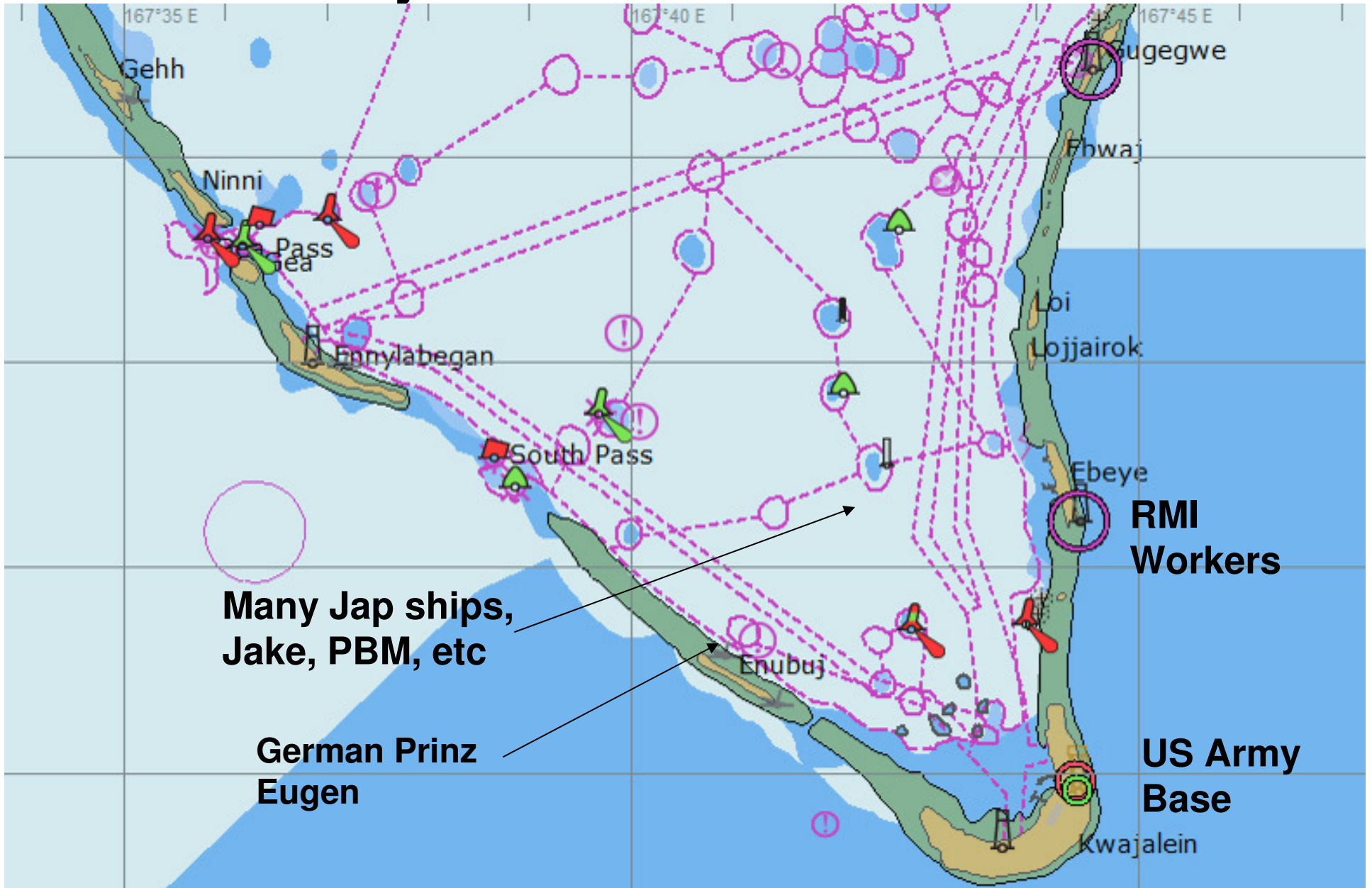
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat

Kwaj
Jap/US base

Google earth



Kwajalein Atoll South End





Japanese ship & plane wrecks

Housing

Docks

Downtown

Radars

SPaws

Marina

Kwajalein Airfield

Kwajalein Isl

© 2013 Google
Image © 2013 DigitalGlobe

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth



Kwaj Army Base

Kwaj Feb 1944



Diving In Kwajalein

A diver is seen swimming in the clear blue water of Kwajalein. The diver is positioned in the upper right quadrant of the frame, moving towards the left. They are wearing a full diving suit, including a mask, snorkel, and a large oxygen tank on their back. Bubbles are visible around the diver's head. In the lower left and center, there is a large, dark, and heavily encrusted structure, likely a piece of the shipwreck. To the right, a curved metal frame, possibly part of a lifeboat or a deck structure, is visible. The overall scene is a deep-sea wreck site.

Asakazi Maru (Japanese)



**AA gun on 424'
Asakazi Maru,
sunk 3 Dec 43**



Asakazi Maru Deck Winch

Prinz Eugen

- Last German WWII cruiser – 681'
- Survived Bikini nuclear tests
- Radioactive--towed to Kwajalein
- Sunk upside down Dec 1946
- Great dive site!



A diver in a blue and black wetsuit, yellow mask, and black fins is sitting on a concrete ledge underwater. The diver is holding a large, black, cylindrical object, which is a 12-gauge shotgun, in their hands. The background is a dark, blue underwater environment with some rocky structures.

8" guns

My, What Big Guns You Have!

Prinz Eugen AA Guns



Aichi E13A Jake Reconnaissance Seaplane



**3 crew, 1100hp, 234mph,
29k', 1300 mi, 1x20mm &
1x7.7mm guns, bombs,
depth charges, 1418 ea**

Aichi E13A Jake





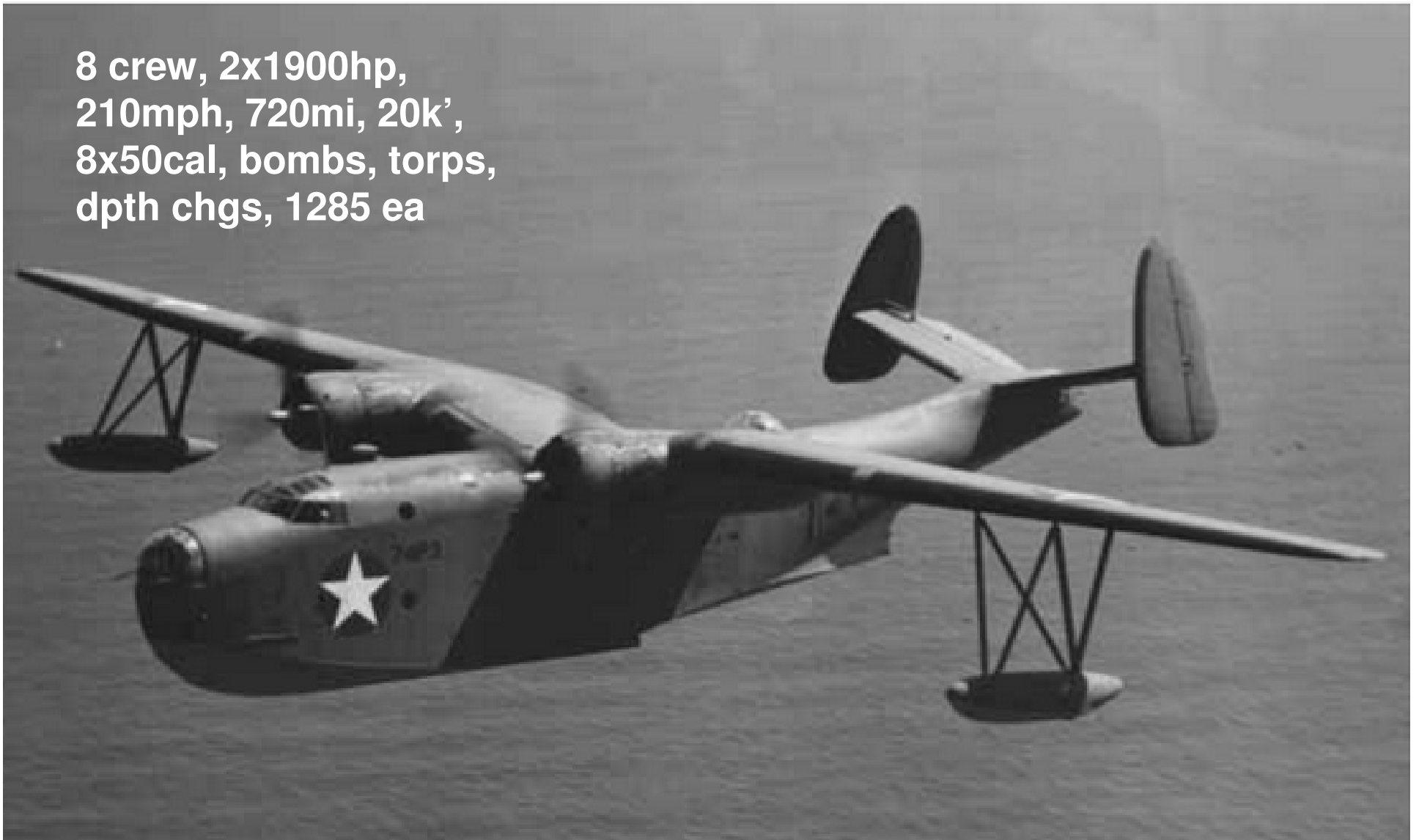
**Sherry inspecting
Jake at 90'**



**Jake cockpit
looking forward**

Martin PBM Mariner Sea Plane

8 crew, 2x1900hp,
210mph, 720mi, 20k',
8x50cal, bombs, torps,
dpth chgs, 1285 ea





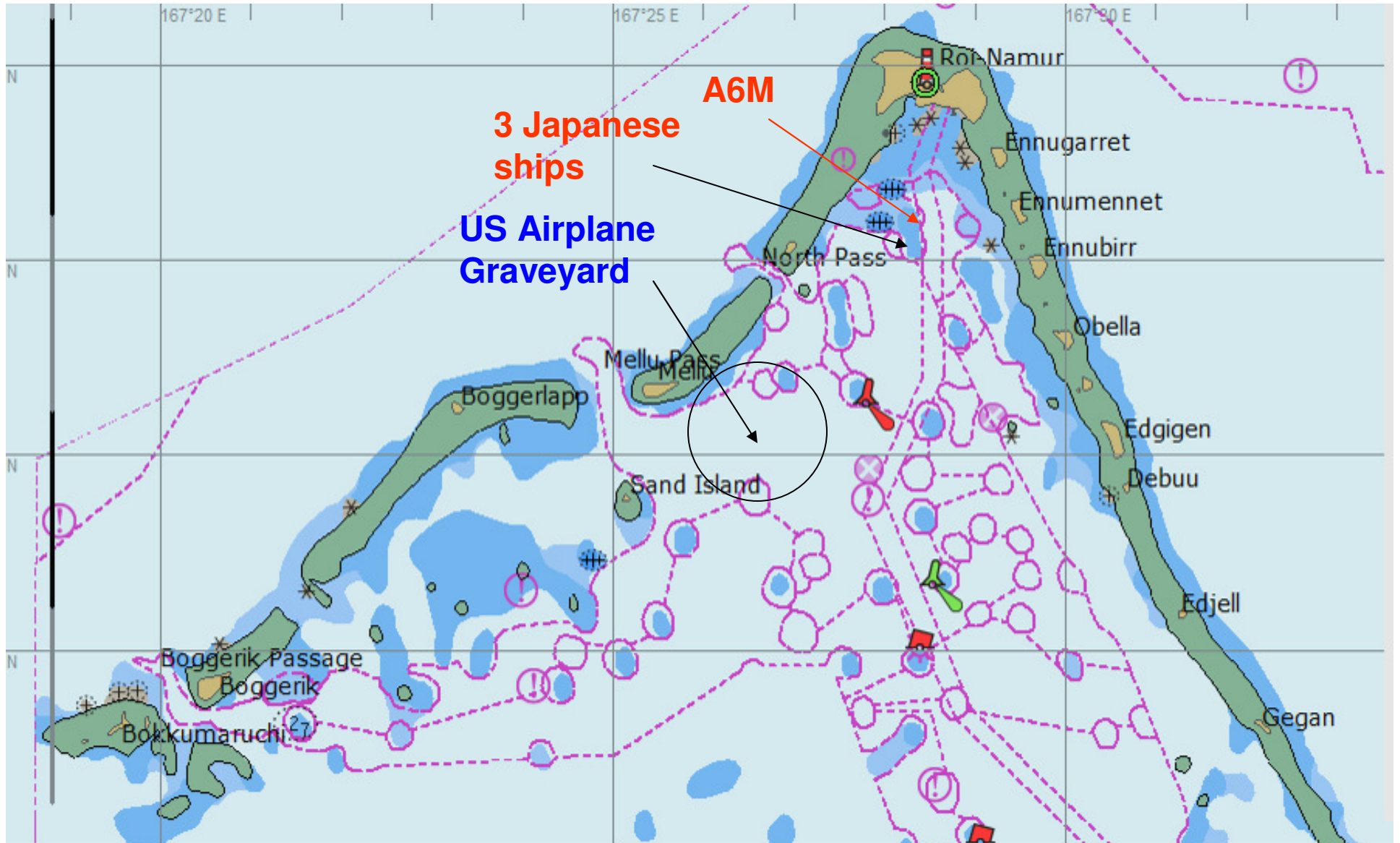
**Martin PBM 5
at 100'**



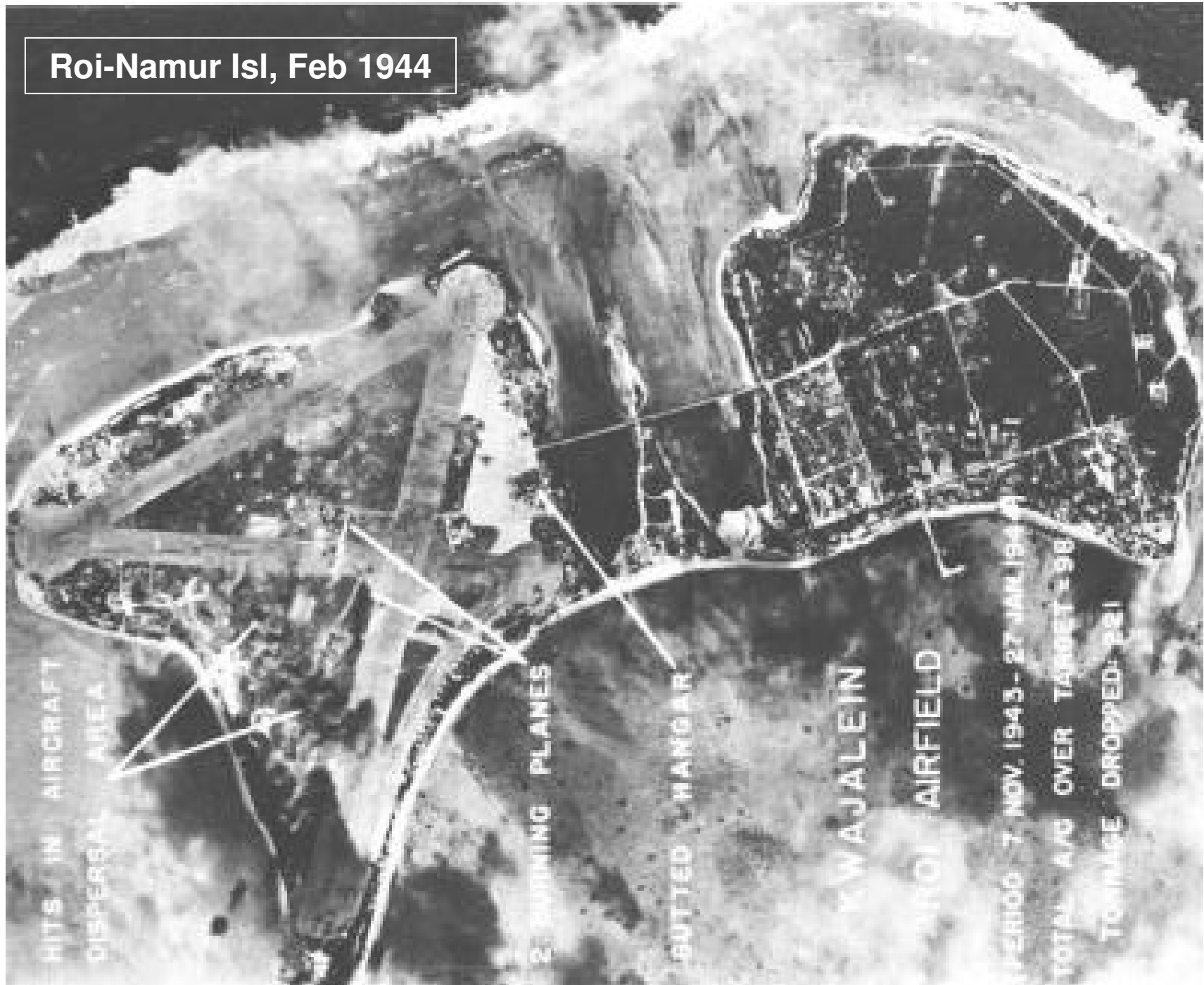


**Dan Farnham
over Martin
PBM-5 nose &
cockpit**

N Kwajalein Atoll, Roi-Namur Island



Roi-Namur Isl, Feb 1944



HITS IN AIRCRAFT
DISPERSAL AREA

2 RUNNING PLANES

BUTTED HANGAR

KAWAJALEIN

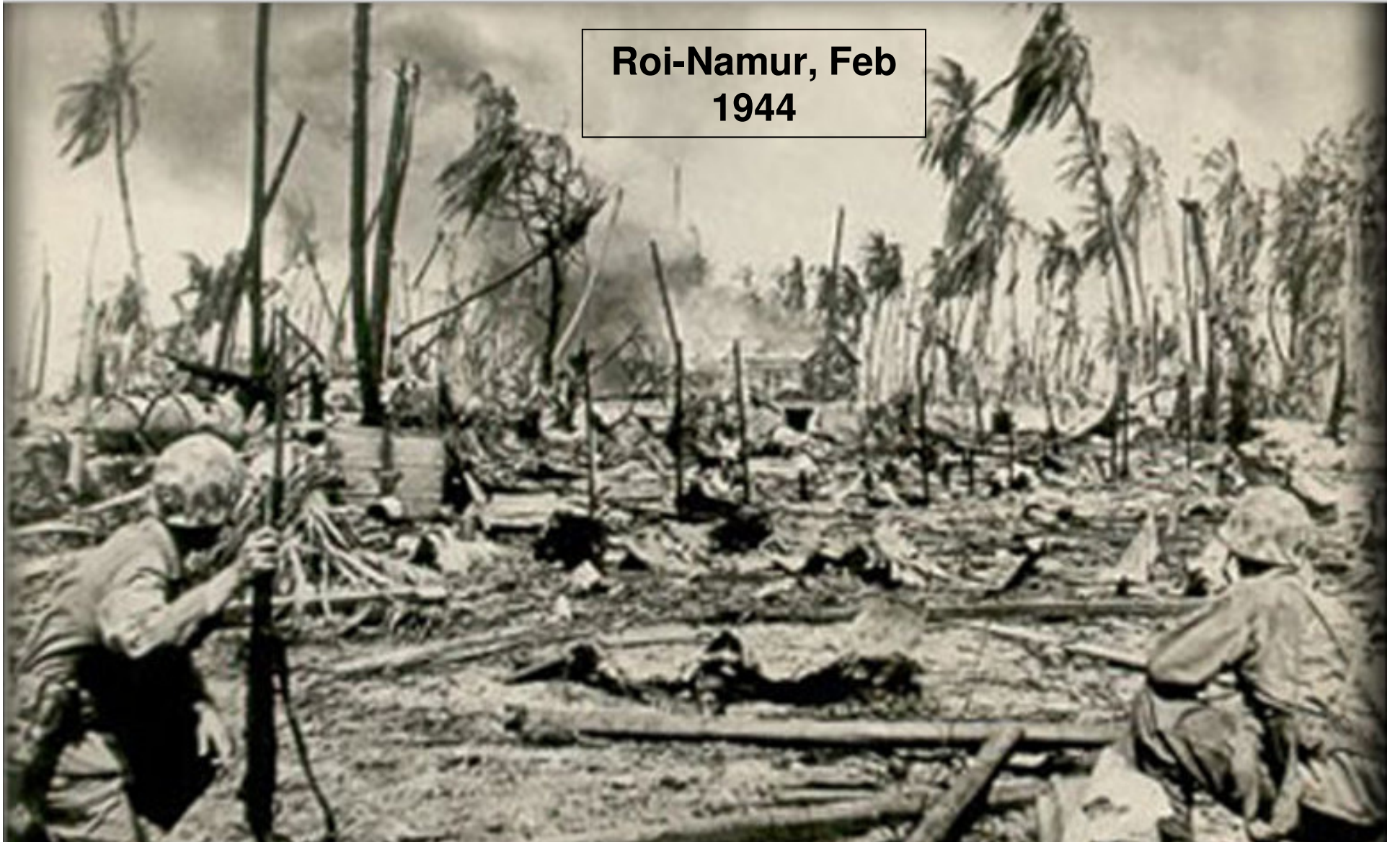
AIRFIELD

PERIOD: 7 NOV. 1943 - 27 JAN. 1944

TOTAL AVG OVER TARGET: 98

TONNAGE DROPPED: 281

**Roi-Namur, Feb
1944**



**Giant radar controlled from
Huntsville, AL, affected our wind
instrument, sees Bball at 1000 nm**



Diving the 'Unique' Airplane Graveyard

**50+ excess planes from
WWII on bottom
everywhere at 100'!**



Mitsubishi A6M Japanese Zero Fighter



One pilot, 1100hp, 350mph, 38k',
1200 nm, 2x20 mm, 2x7.7 mm
guns, bombs, 10499 ea



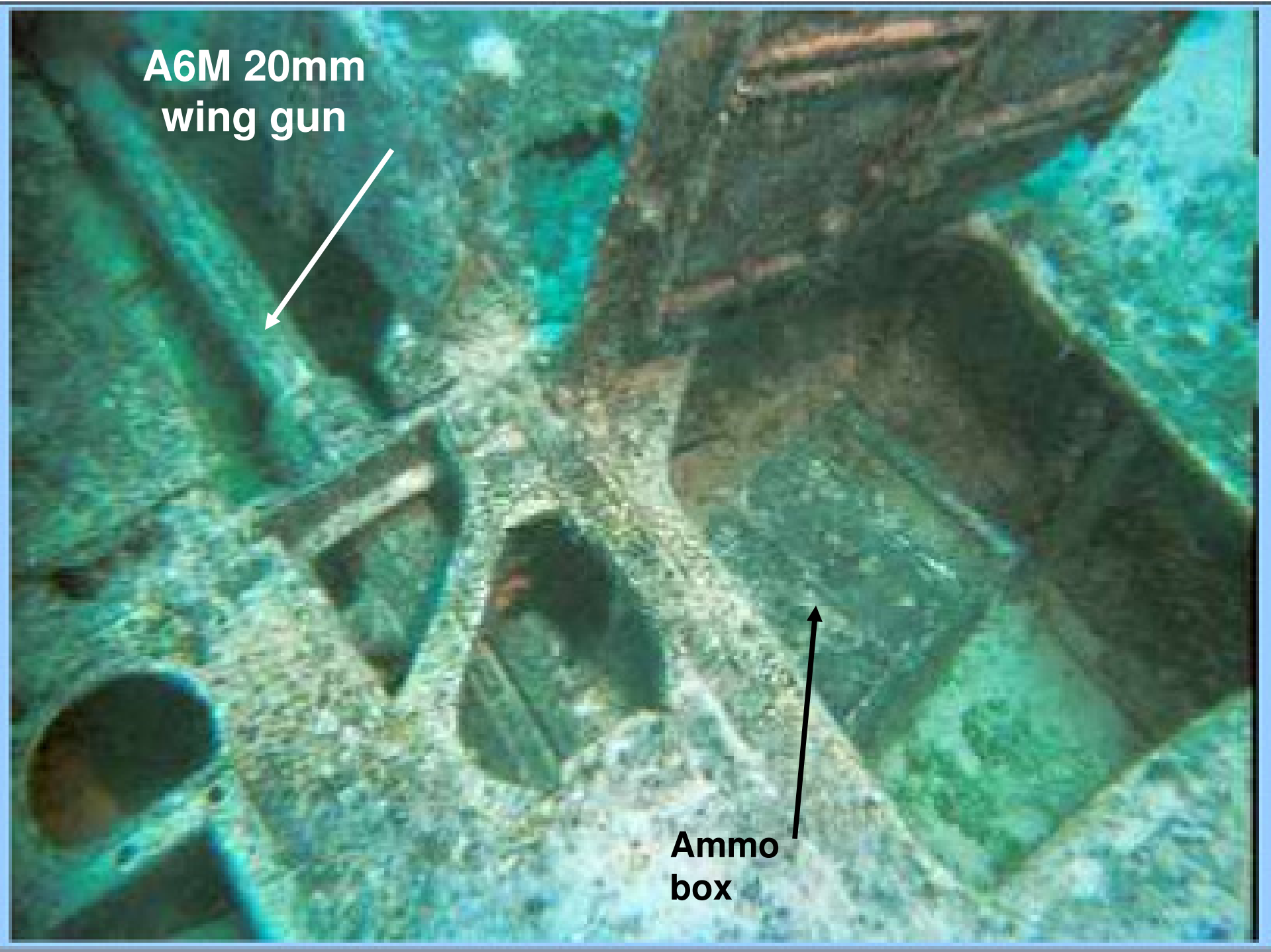
20mm
gun

A6M Zero Upside Down 60'

**A6M 20mm
wing gun**



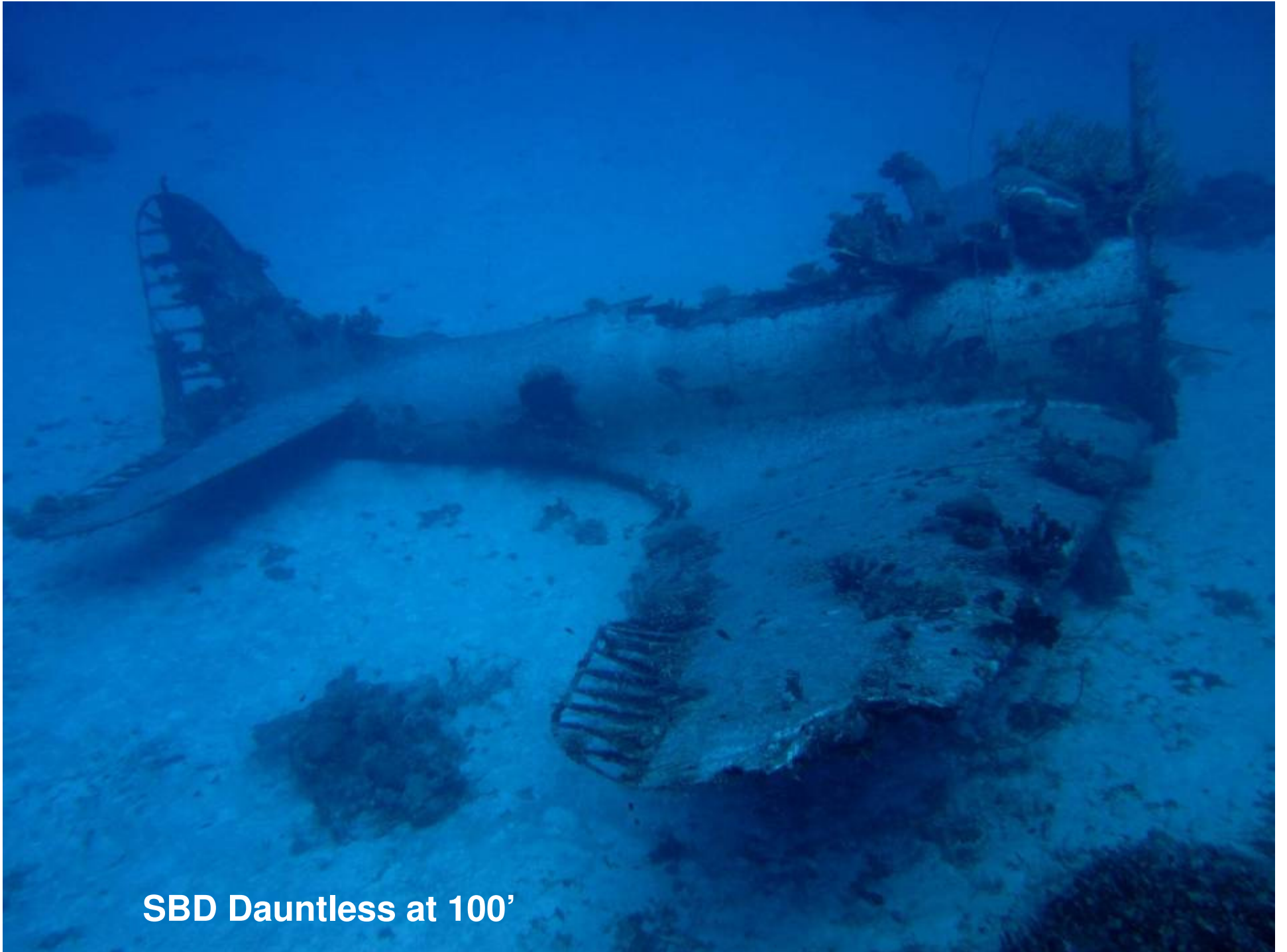
**Ammo
box**



Douglas SBD Dauntless Dive Bomber



2 crew, 1200hp,
255mph, 770mi, 24k',
2x50cal, 2x30cal,
bombs, 5936 ea



SBD Dauntless at 100'

**Sherry & 3 SBDs
at 100'**





SBD Cockpit

North American B-25 Mitchell Bomber



1942 Doolittle raid on
Japan from USS Hornet

5 crew, 2x1700hp,
275mph, 1300mi,
24k', 1x75mm,
16x50cal, bombs,
rockets, 9800 ea

**B-25 Mitchell looking
aft at 100'**





**B-25 Mitchell tail
section at 100'**



**B-25
cockpit,
from port**

Consolidated C-46 Commando Cargo Plane



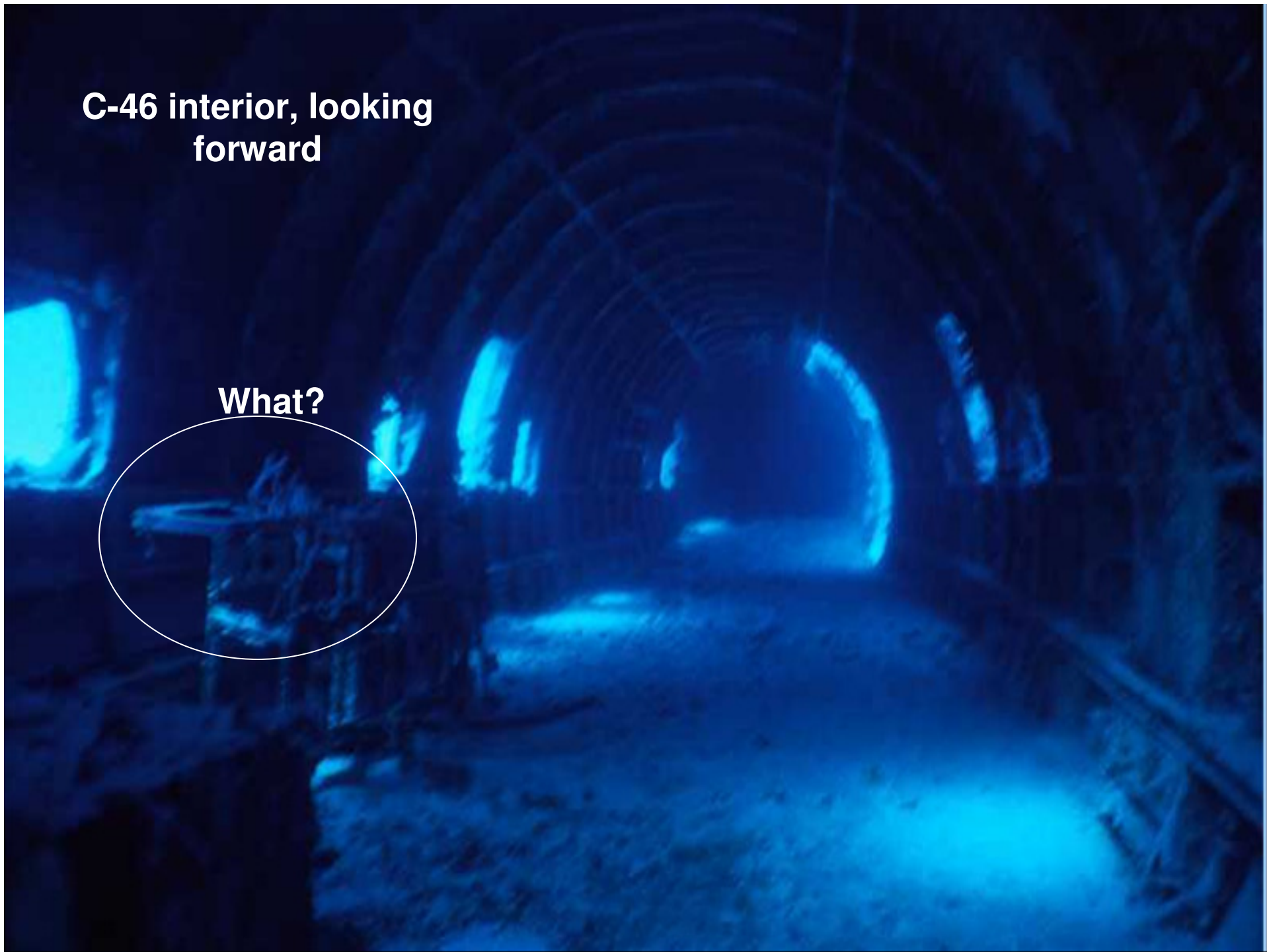
4 crew, 40 troops,
2x2000hp,
270mph, 3150mi,
24.5k', 3181 ea

An underwater photograph showing the wreckage of a C-46 Commando aircraft. The aircraft is partially submerged in clear blue water, resting on a sandy seabed. The fuselage is the primary focus, with a large circular opening visible on the left side. The lighting is bright, highlighting the metallic surfaces and the surrounding water. The overall scene is a clear, well-lit underwater environment.

**C-46 Commando
in 100'**

C-46 interior, looking forward

What?



N Kwaj Japanese Shipwrecks





**340' Japanese cargo ship Eiko Maru #2 bow,
sunk 29 Jan 44 by USS New Jersey**

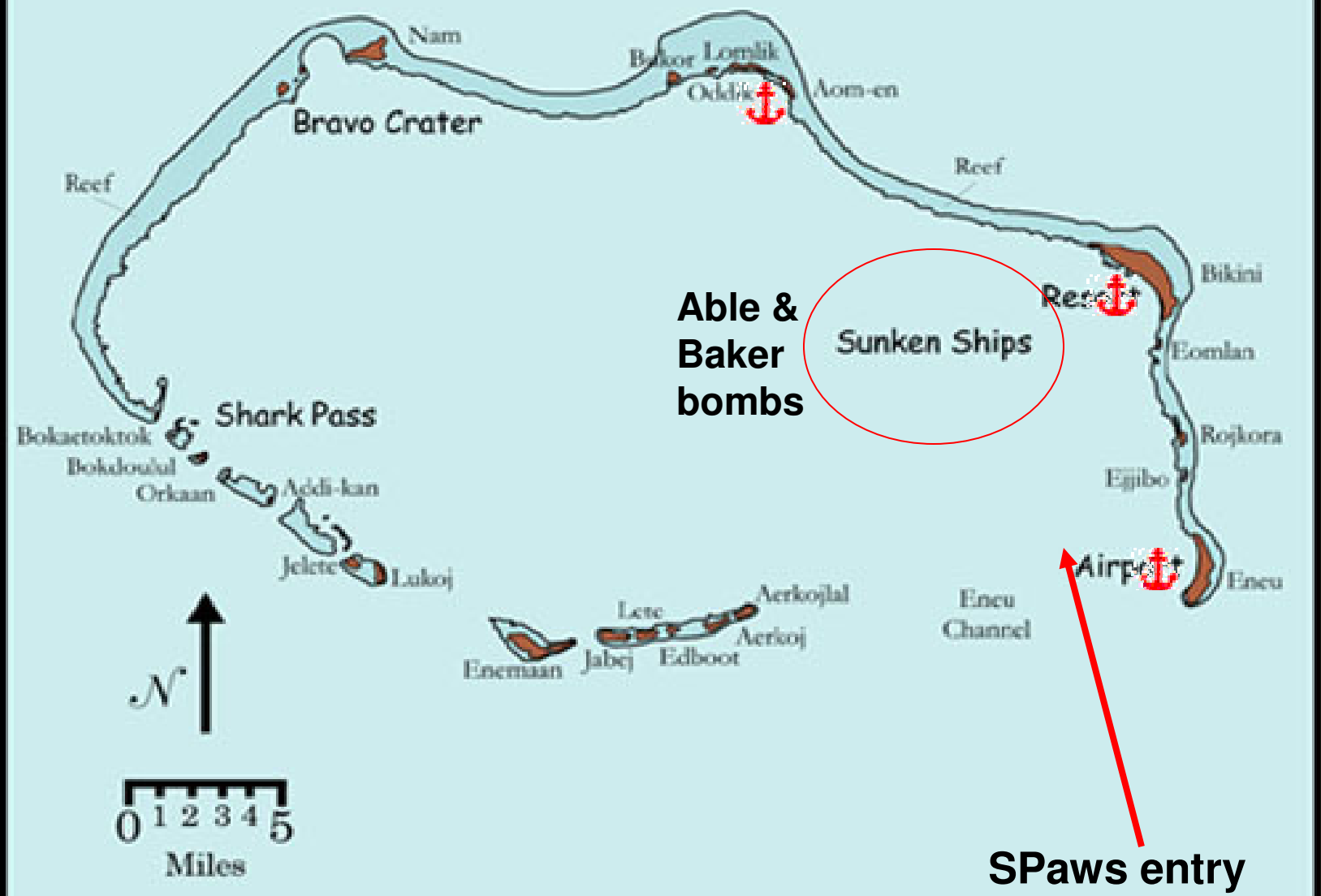


Eiko Maru bow gun at 80'

Eiko Maru deck winch



Bikini Atoll



Bikini Atoll

- **1946-58 site of US Nuclear bomb testing**
- **167 original residents relocated**
- **23 nuclear devices detonated in lagoon**
- **Operation Crossroads (Able & Baker ship tests)-**
 - **242 Ships and 42,000 U.S. personnel in Bikini for test prep**
 - **95 Ships moored in Bikini for tests**
 - **11 Ships sunk as a result of testing & still there today**
 - **CV3 Saratoga, 2 BBs, 2 submarines**
- **Feb 54 15 MTon Bravo hydrogen bomb**

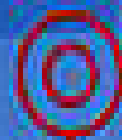
The Nuclear Fleet of Bikini Atoll

NAGATO
33,000-ton battleship.
Flagship of the Japanese Navy—led the attack on Pearl Harbor.

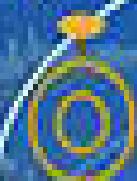
Bikini Island



ABLE
1946



BAKER
1946



180 feet



ARKANSAS
Battleship

CARLISLE
Transport ship

APOGON
Submarine

SARATOGA
39,000-ton aircraft carrier

GILLIAM
Transport ship

PILOTFISH
Submarine

ANDERSON
Destroyer

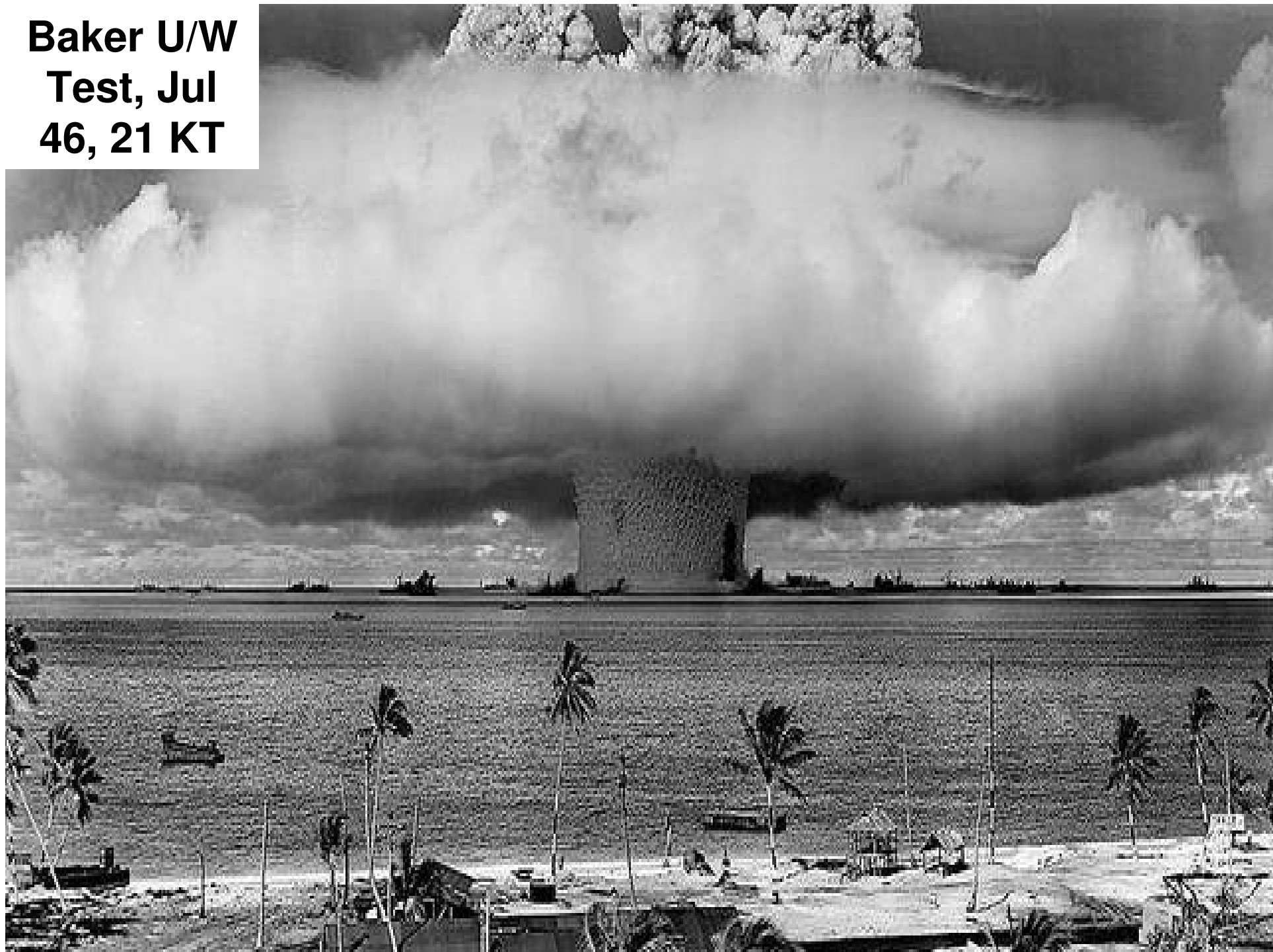
LAMSON
Destroyer

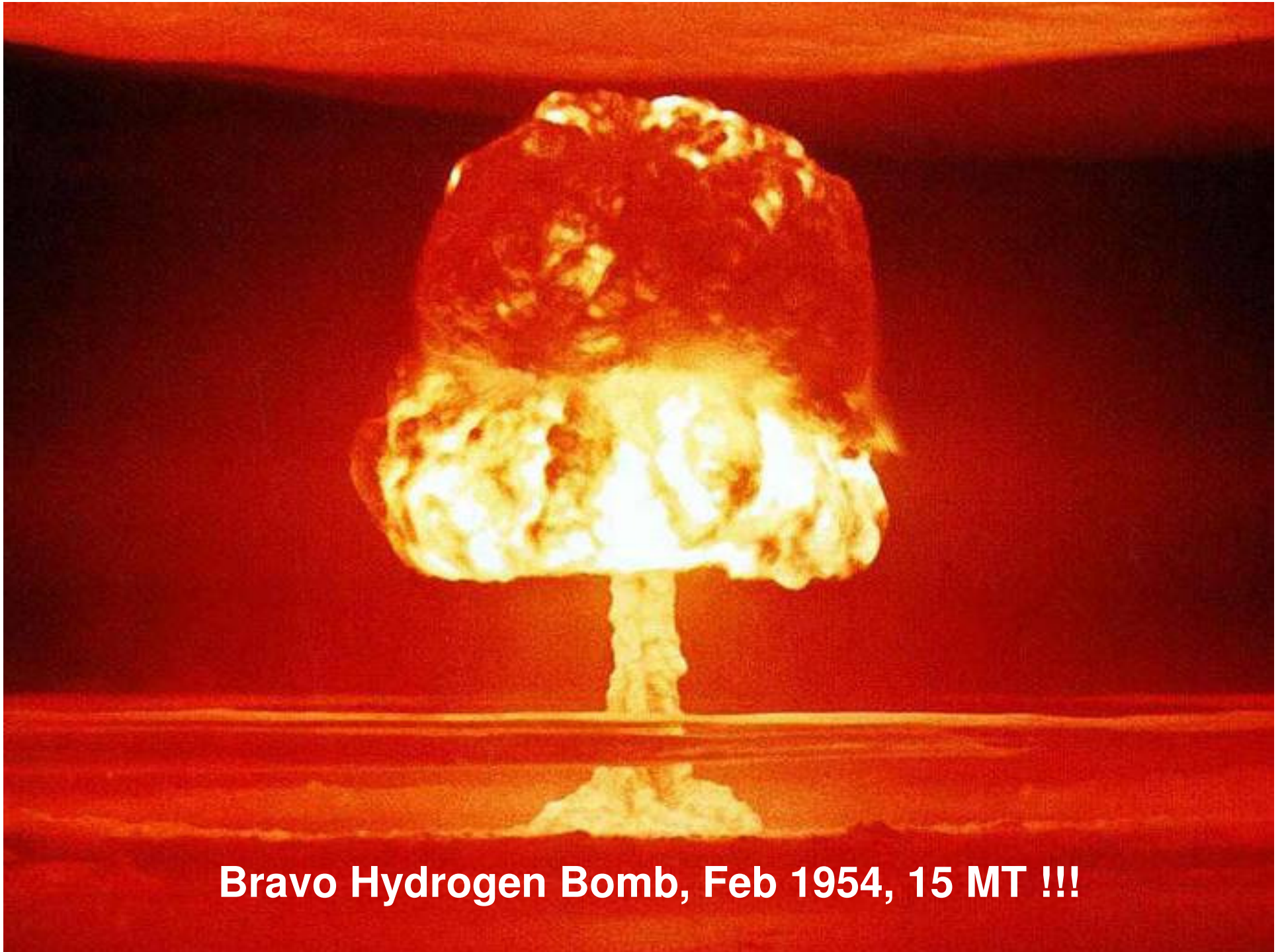
SAKAWA
Japanese cruiser

**Able Air Test,
Jun 46, 21 KT**



**Baker U/W
Test, Jul
46, 21 KT**





Bravo Hydrogen Bomb, Feb 1954, 15 MT !!!



**Many strongly
built nuclear
test bunkers**



**Bikini today, dive
operation 99-08,
liveaboard 11-Pres**



**Still useable workshops,
boats and dive equipment**



**M/V Windward live aboard
dive boat, 4 crew, 12 guests,
\$6500 10 day trip**



**Our daily dinghy trip to
MV Windward to dive**



**Dual lock
recompression chamber**



**\$10,000 in
camera & tech
diving gear**

USS Saratoga CV-3

Commissioned
1928, third US fleet
carrier

Biplanes

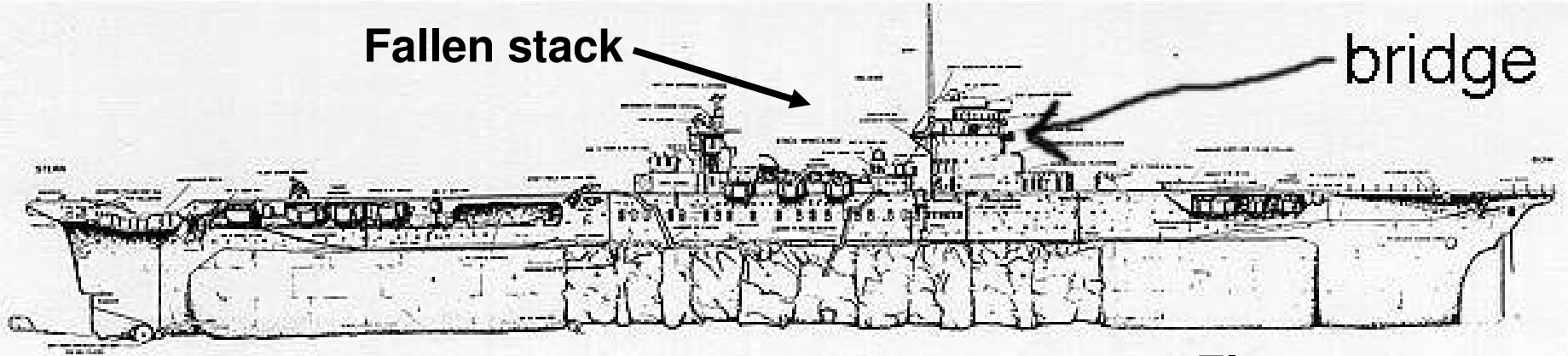


Sunk at Bikini
Nuclear Tests
Jul 1946



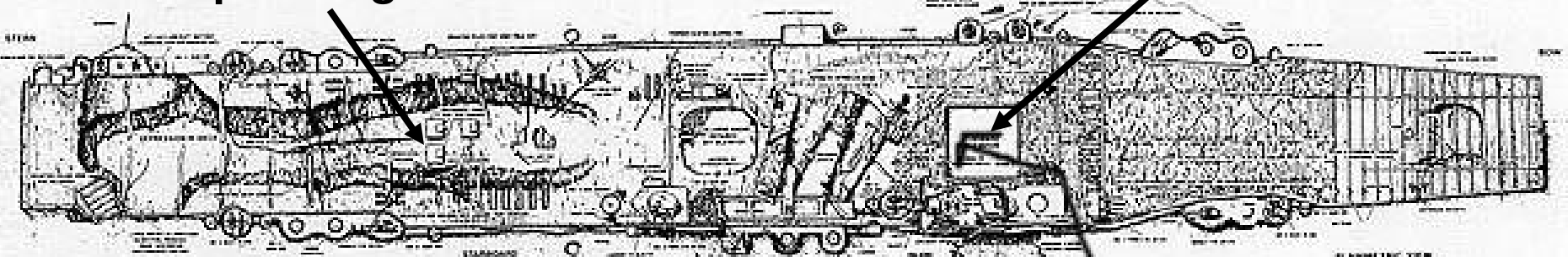
Fallen stack

bridge



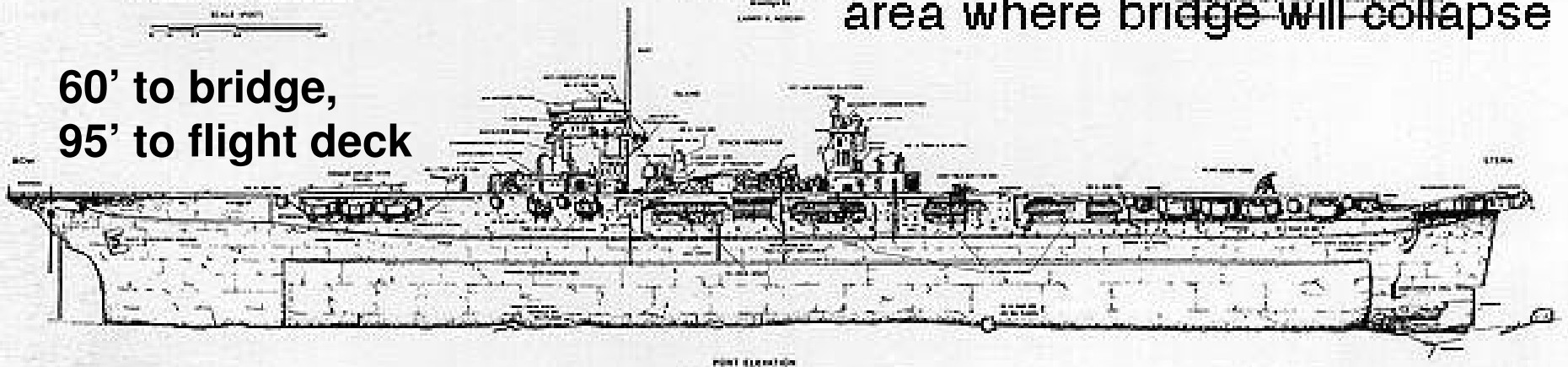
Collapsed flight deck

Elevator



area where bridge will collapse

**60' to bridge,
95' to flight deck**



U.S.S. SARATOGA (CV-3) AT BIKINI ATOLL

U.S. NATIONAL PARK SERVICE
BIOLOGICAL-CULTURAL RESOURCES UNIT

DESIGNED BY
LARRY S. ADAMS

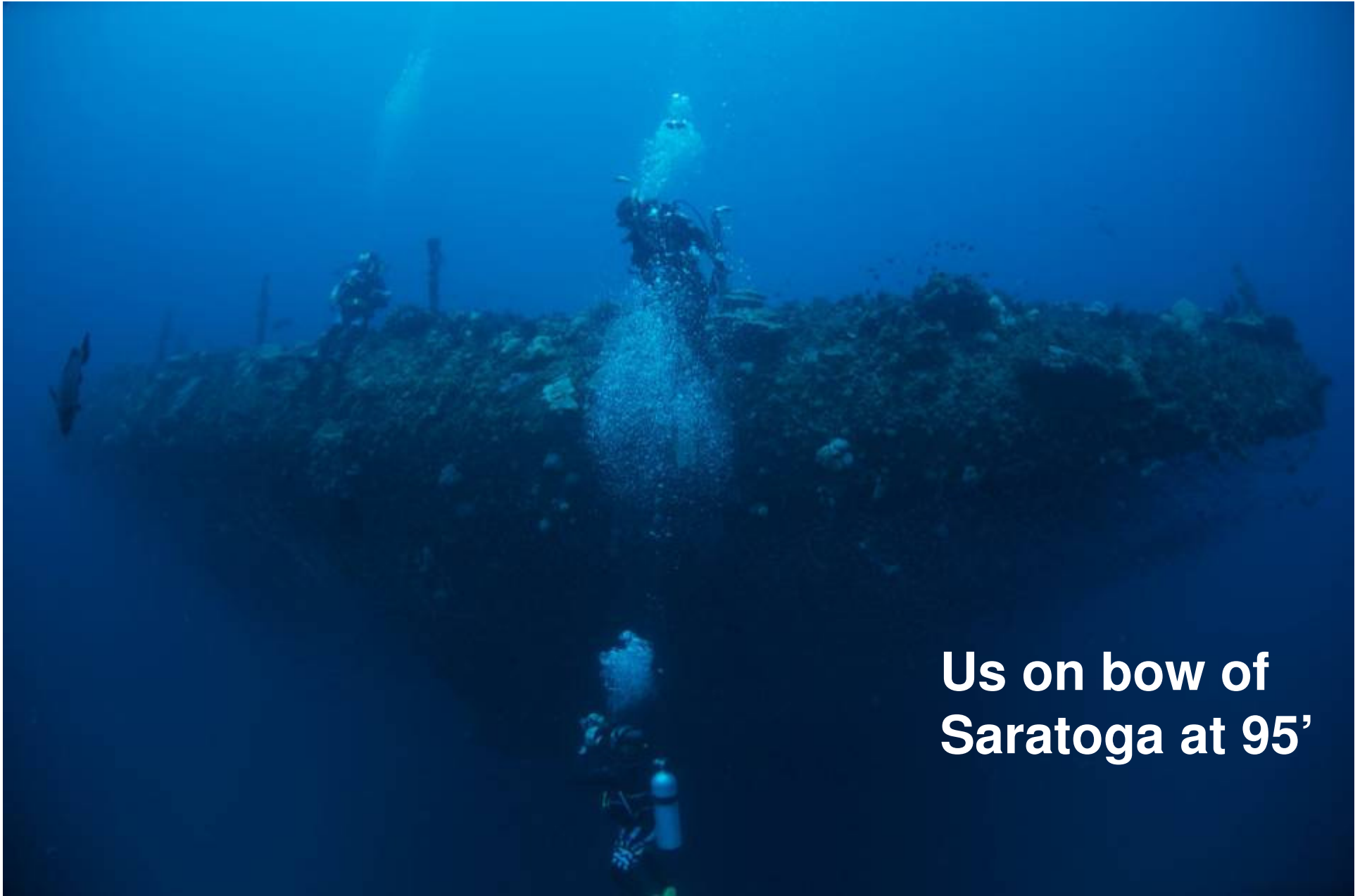
A Reproduction of the National Park Service
U.S. Department of Interior, is a public law that may not be
reproduced or transmitted in any form or by any means, electronic or
mechanical, including photocopying, recording, or by any information
storage and retrieval system.

SCALE: 1/8"=1'-0"

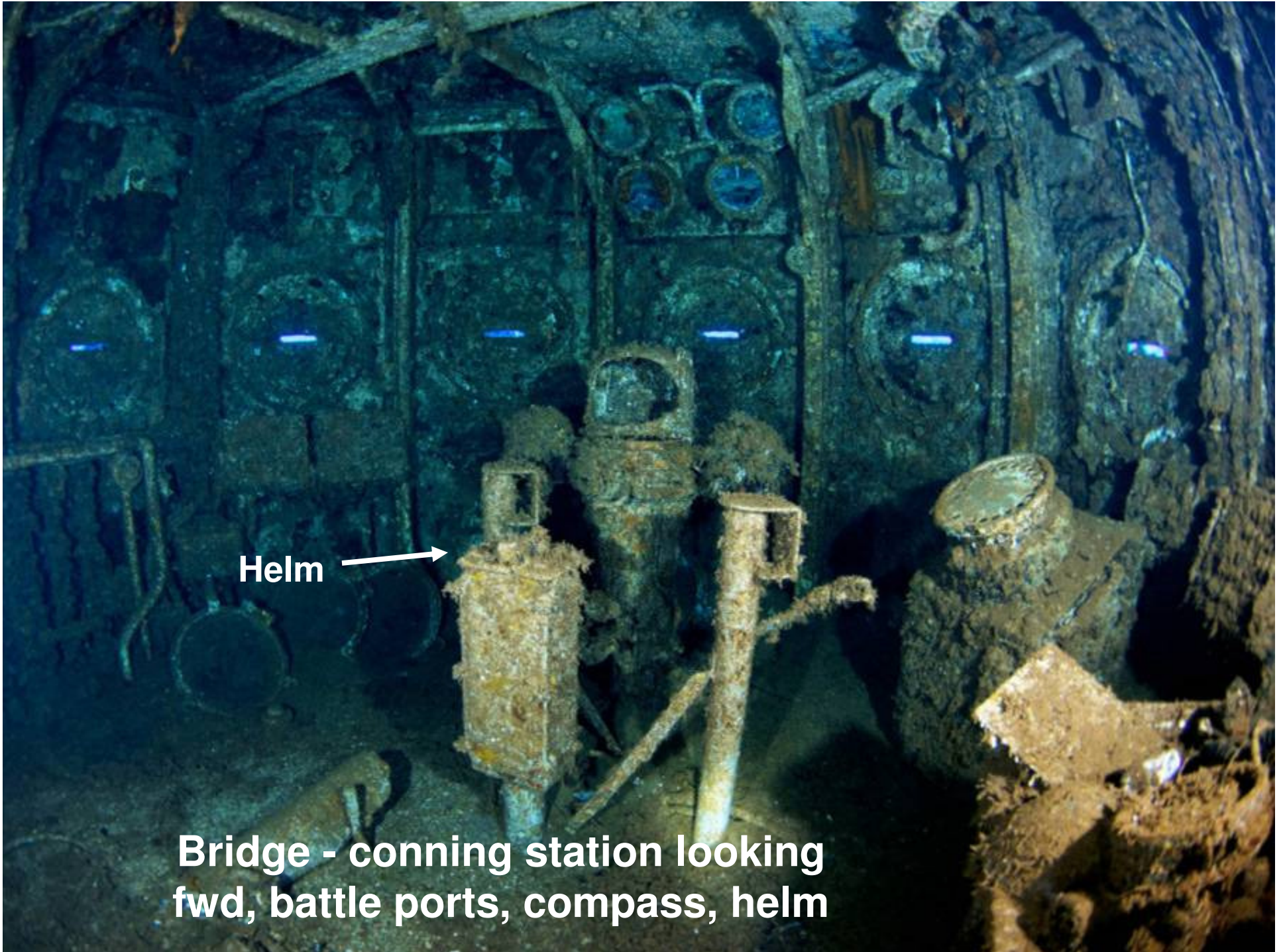
This drawing is for informational purposes only. It is not intended to be used for any other purpose.
U.S. Department of Interior, National Park Service

**Saratoga CV-3
sinking at Bikini,
Jul 46**





**Us on bow of
Saratoga at 95'**



Helm →

Bridge - conning station looking fwd, battle ports, compass, helm



**Saratoga ship's
compass,
missing cover**



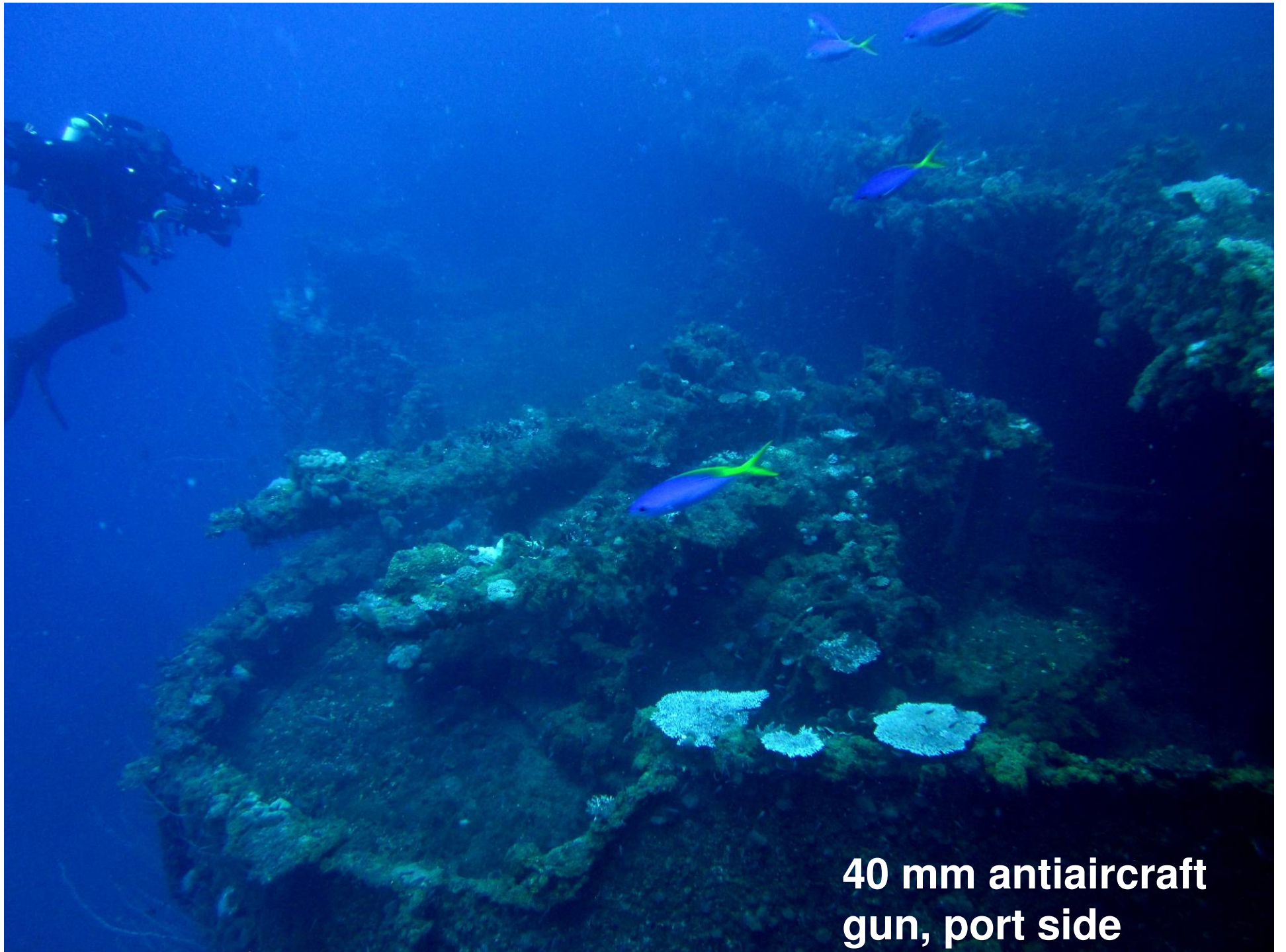
**24 hr clock, dishes,
bottles displayed on
bridge**



**5"- 38 twin
mount fwd
deck gun**

A photograph of two divers underwater. They are positioned in front of a large, rusted metal structure, likely a shipwreck. The diver on the left is wearing a dark wetsuit and a mask. The diver on the right is wearing a dark wetsuit with a bright yellow stripe and a mask. Both divers are holding onto the structure. The water is clear and blue. The text "Us at forward 5''- 38 deck gun" is overlaid in the bottom left corner.

**Us at forward
5''- 38 deck gun**



**40 mm anti-aircraft
gun, port side**

Curtiss SB2C Helldiver Dive Bomber



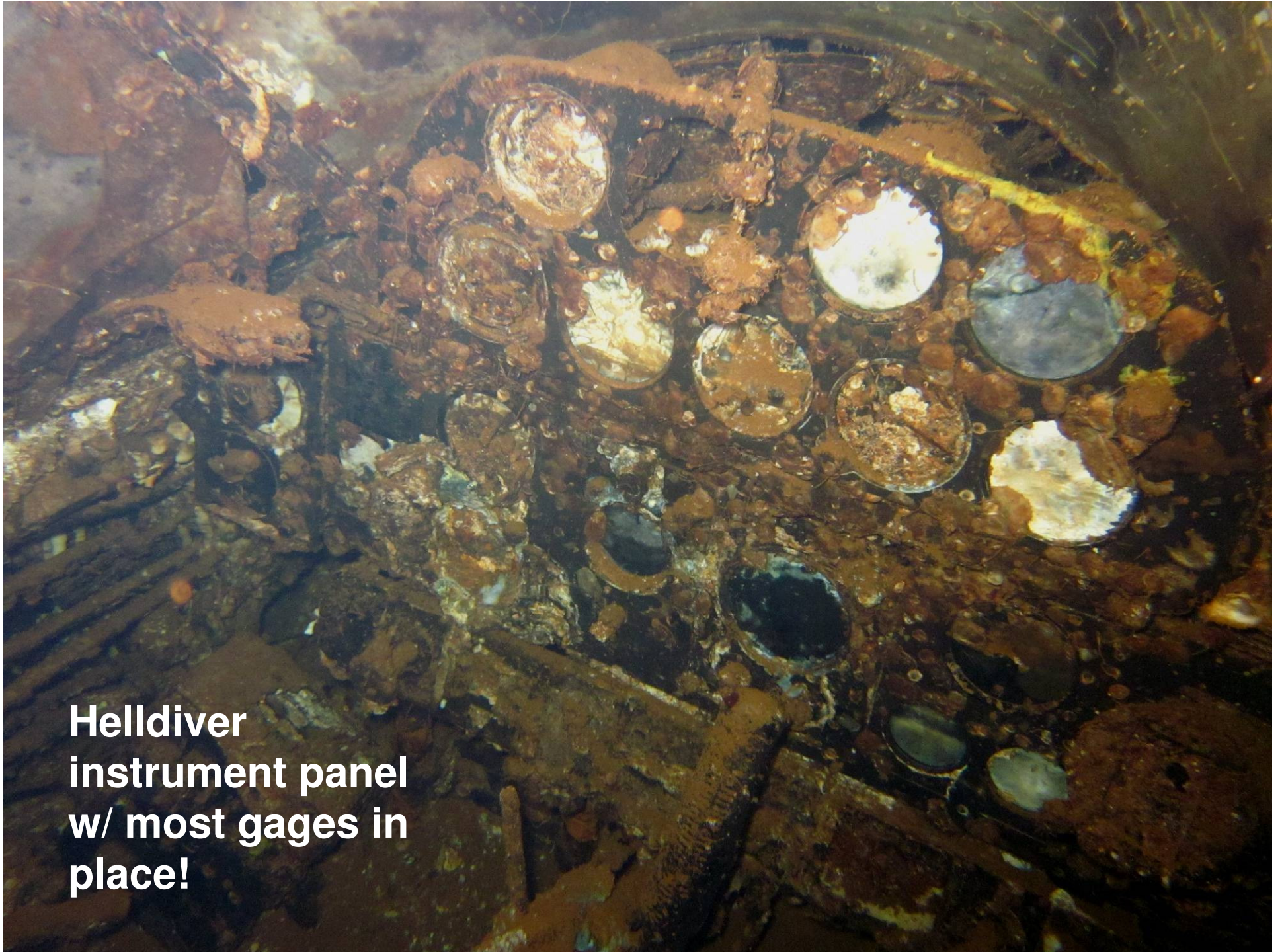
2 crew, 1900hp, 295mph,
1200mi, 29k', 2x20mm,
2x30cal, bombs, 7150 ea

SB2C Helldiver



**Dave & SB2C Helldiver in
Hangar Deck at 130'**





**Helldiver
instrument panel
w/ most gages in
place!**



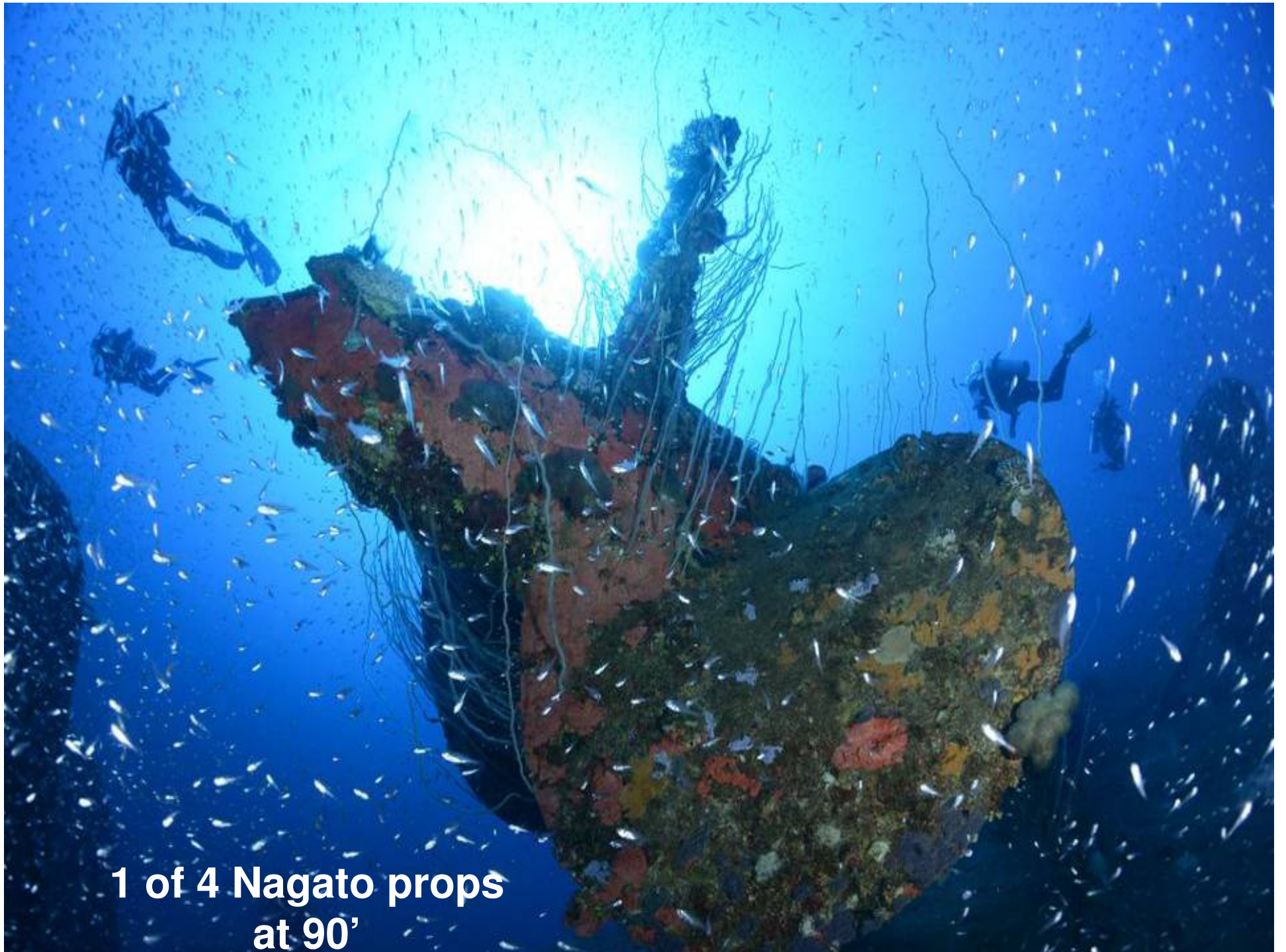
Mark V Air

???

Hard hats in the
dive locker



**IJN Nagato - last Japanese battleship,
CNO Adm Yamamoto's flagship**

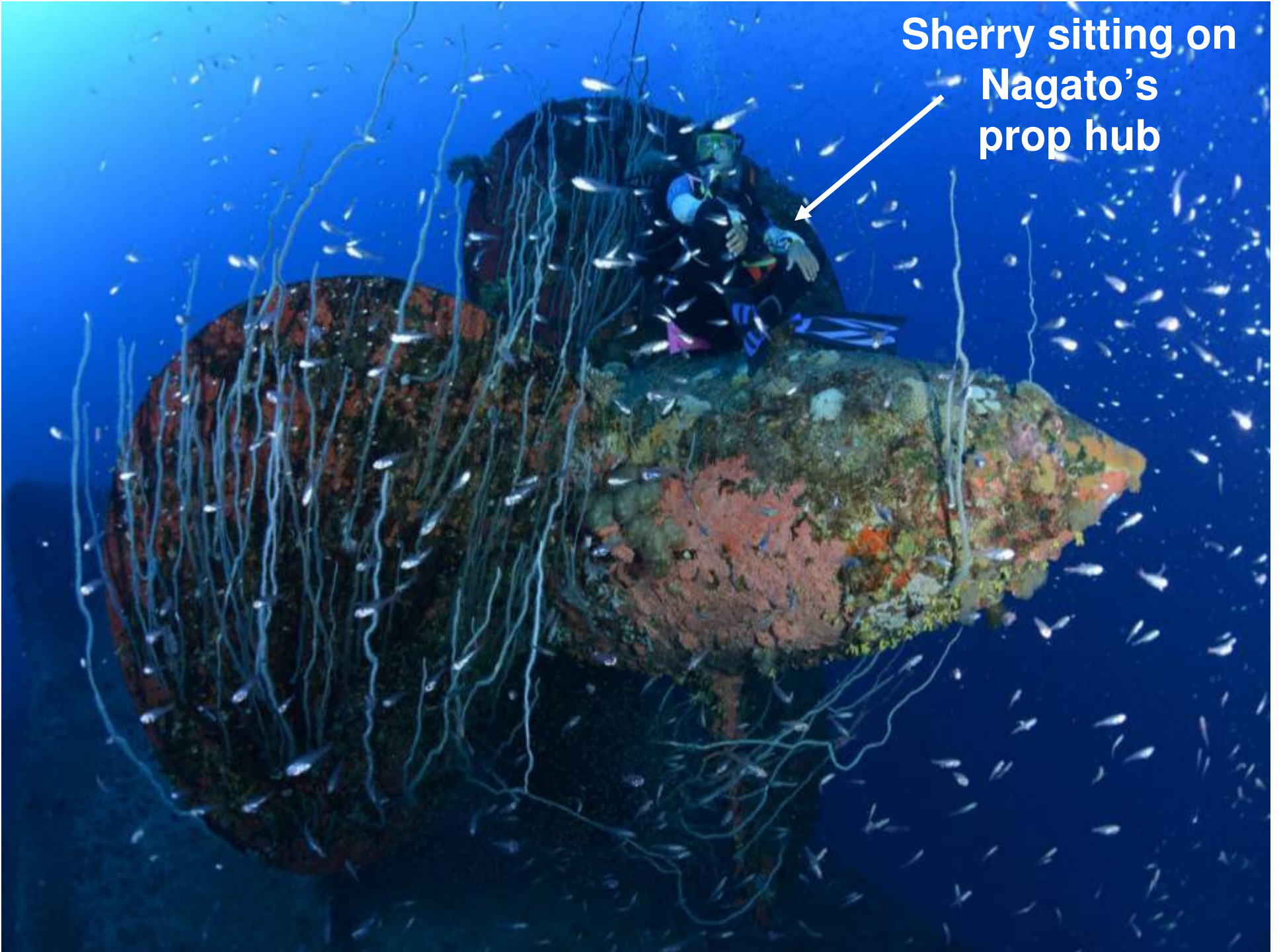


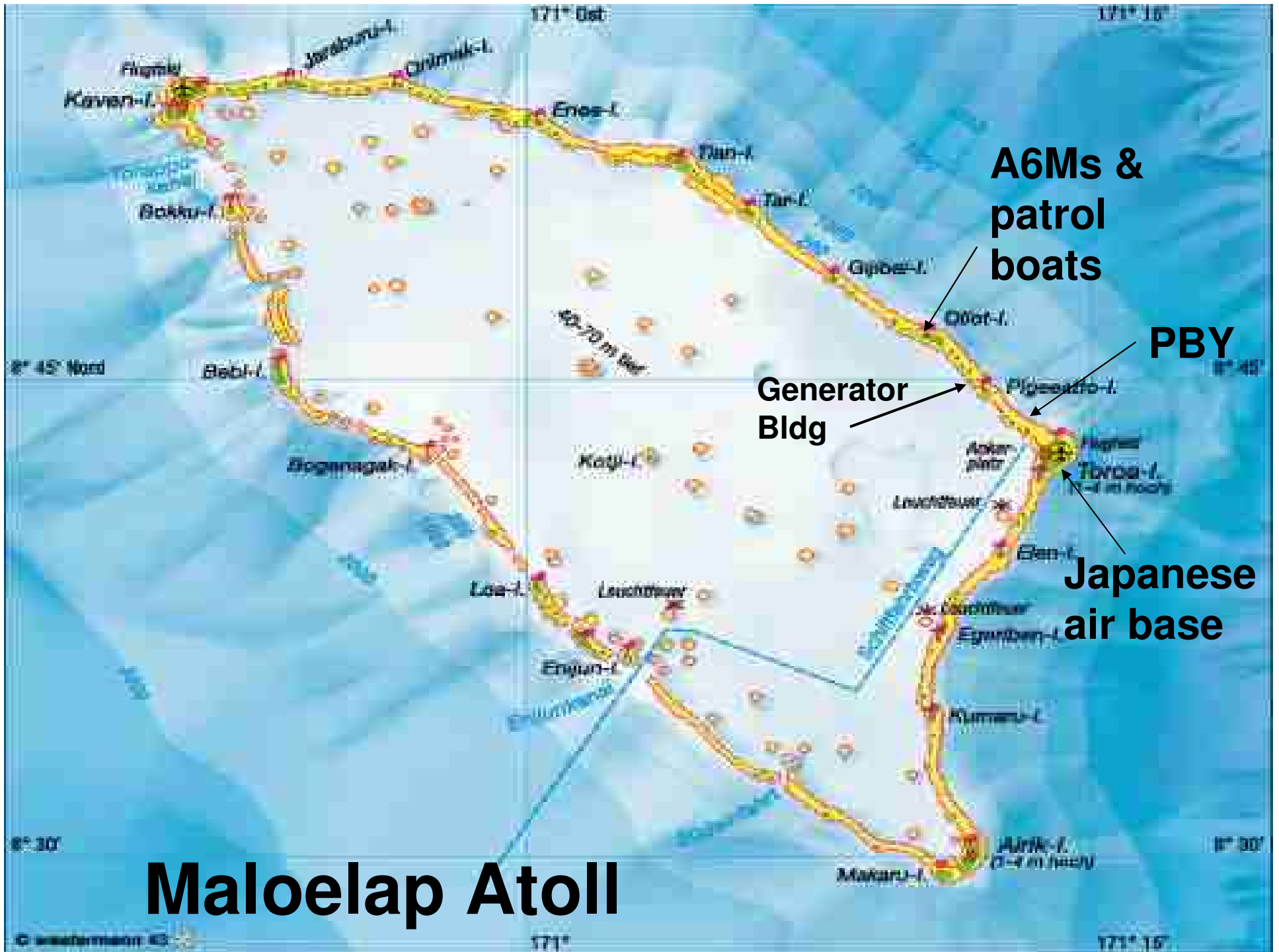
**1 of 4 Nagato props
at 90'**



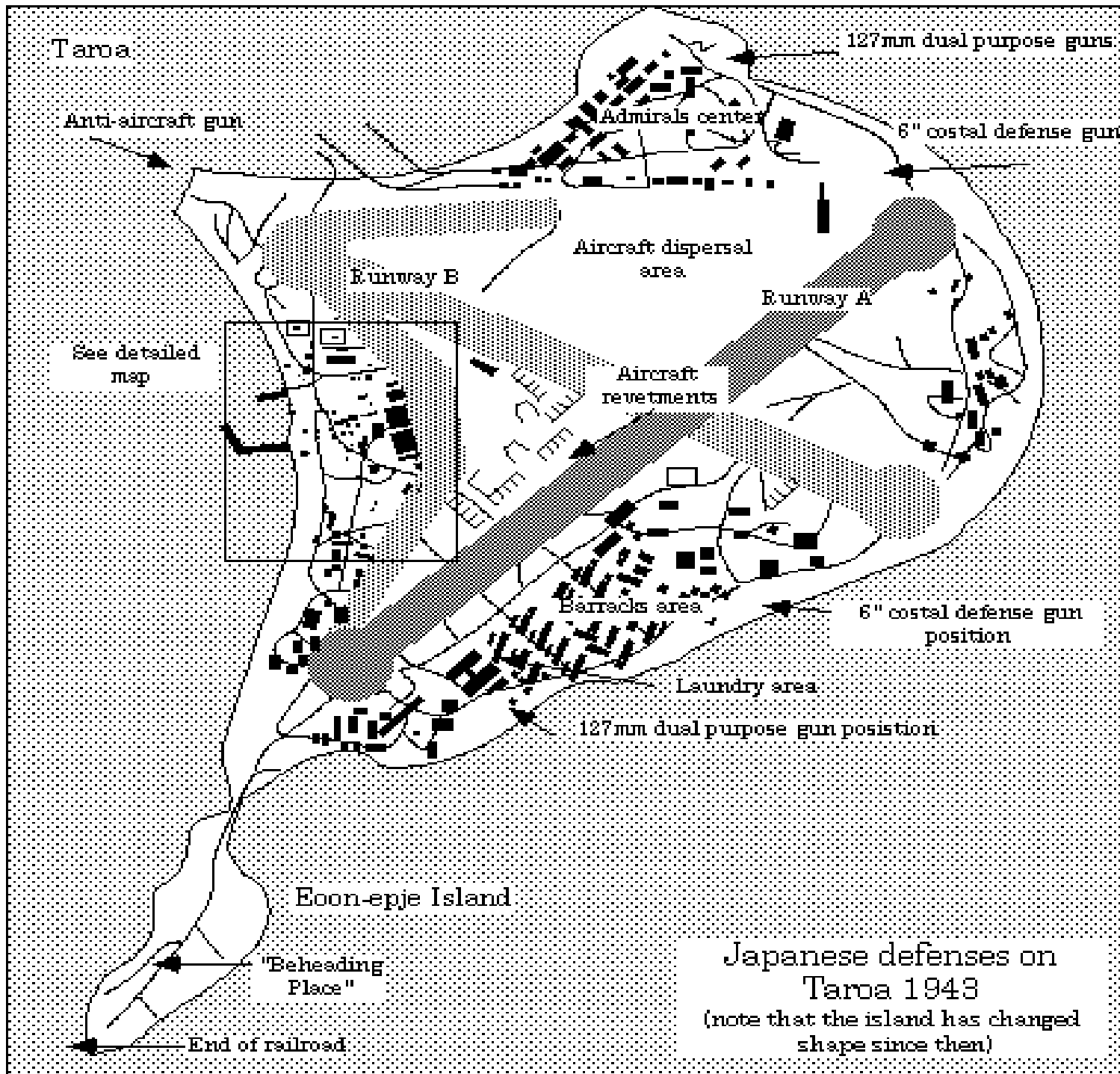
**Us on 1 of 4 Nagato
props at 90'**

Sherry sitting on
Nagato's
prop hub





Maloelap Atoll





Taroa Island, 1944



**Generator building on
Pigeatto Isl**

**Diesel generator
room w/ diesels intact**





**Large defensive shore
bunker**



**Japanese
127mm Dual
Purpose gun**



**Taroa 3 story Command &
Radio Building**



**A6M Zero in the Plane
Graveyard**



**Plane Graveyard
radial aircraft
engines**

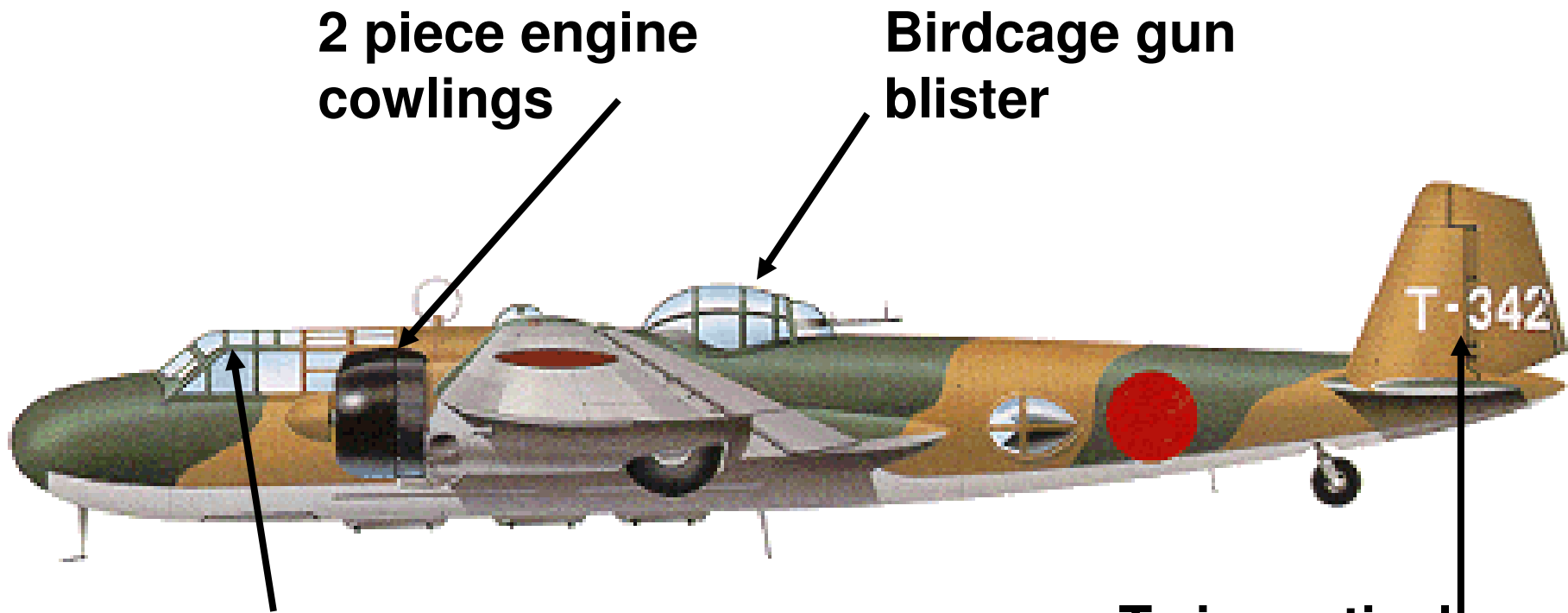


Sherry in the Plane Graveyard

Mitsubishi G3M Nell Medium Bomber



5-7 crew, 2x1300hp,
258mph, 3870mi,
33.7k', 1x20mm,
4x7.7mm, bombs,
torps, 1048 ea



2 piece engine cowlings

Birdcage gun blister

Angled cockpit canopy side brace

Twin vertical stabilizers/tails

G3M Nell ID



**Rare G3M Nell,
1980s photo**



**Intact engine in Plane
Graveyard-probable G3M Nell**



**G3M Nell
cockpit,
1980s photo**



**Aircraft
auxiliary
fuel tanks**

Consolidated PBY Catalina Maritime Patrol Amphibian Bomber



7 crew, 2x1200hp,
175mph, 3050mi, 18k',
2x50cal, 3x30cal,
bombs, dpth chgs,
3300 ea

PBY Engine on the Beach





Other PBY Engine



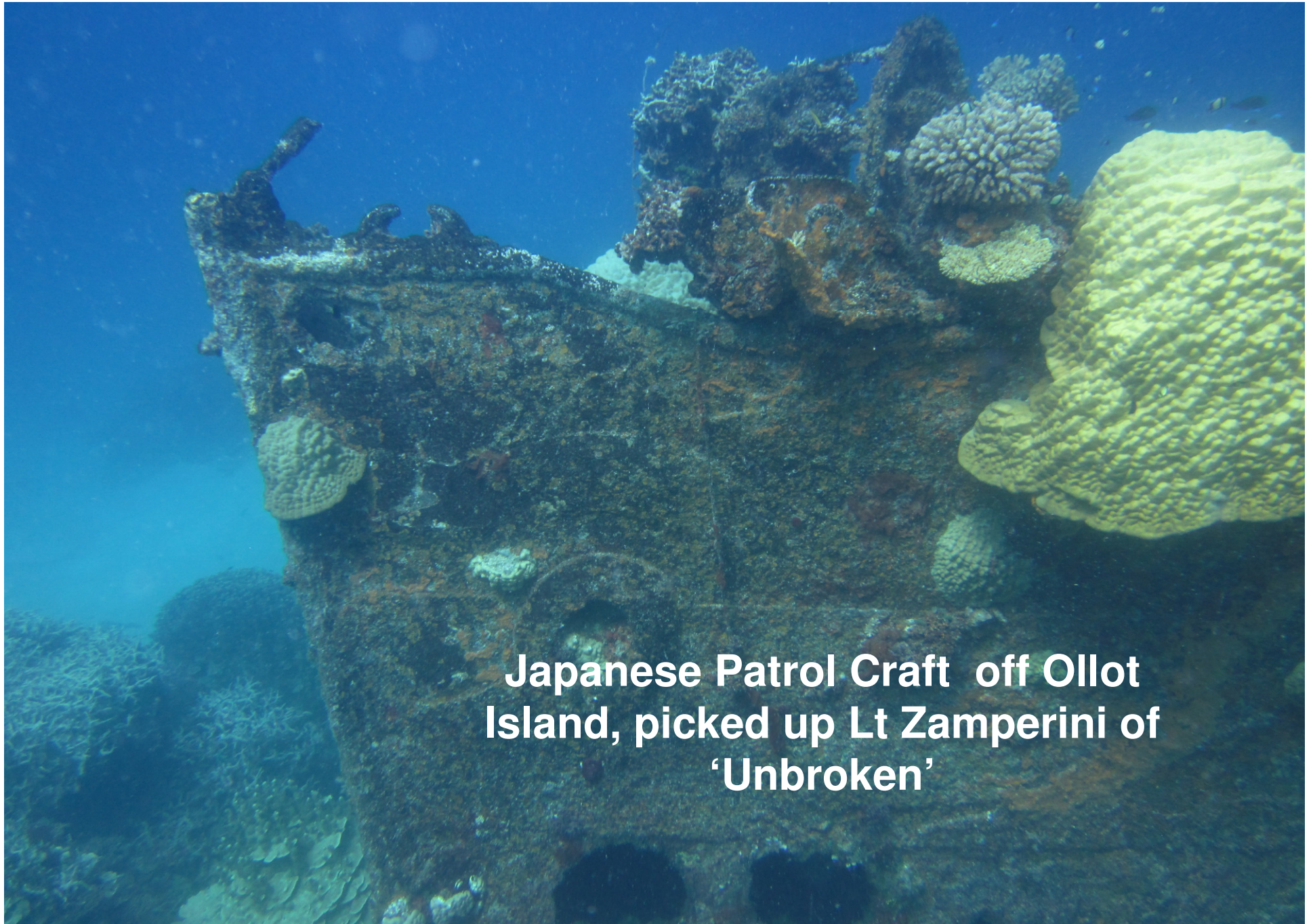
**Japanese cargo ship Toroshima
Maru sunk at Taroa**



Sherry at Toroshima Maru prop

Toroshima Maru depth charges





**Japanese Patrol Craft off Ollot
Island, picked up Lt Zamperini of
'Unbroken'**

Mitsubishi A6M Zero/Zeke





A6M Zero engine, bent blades mean crashed



Japanese A6M Zero upside down wing/engine

Local kids posing with A6M Zero at Ollot Island



Mili Atoll

Mili Isl Jap
airfield

Mili Island

B-25D
Mitchell

Arbar

Mili Atoll

Enajet

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat

Google earth

59 56 917' N 1719 47 252' E elev. 6077 ft. eye alt. 47.14 mi

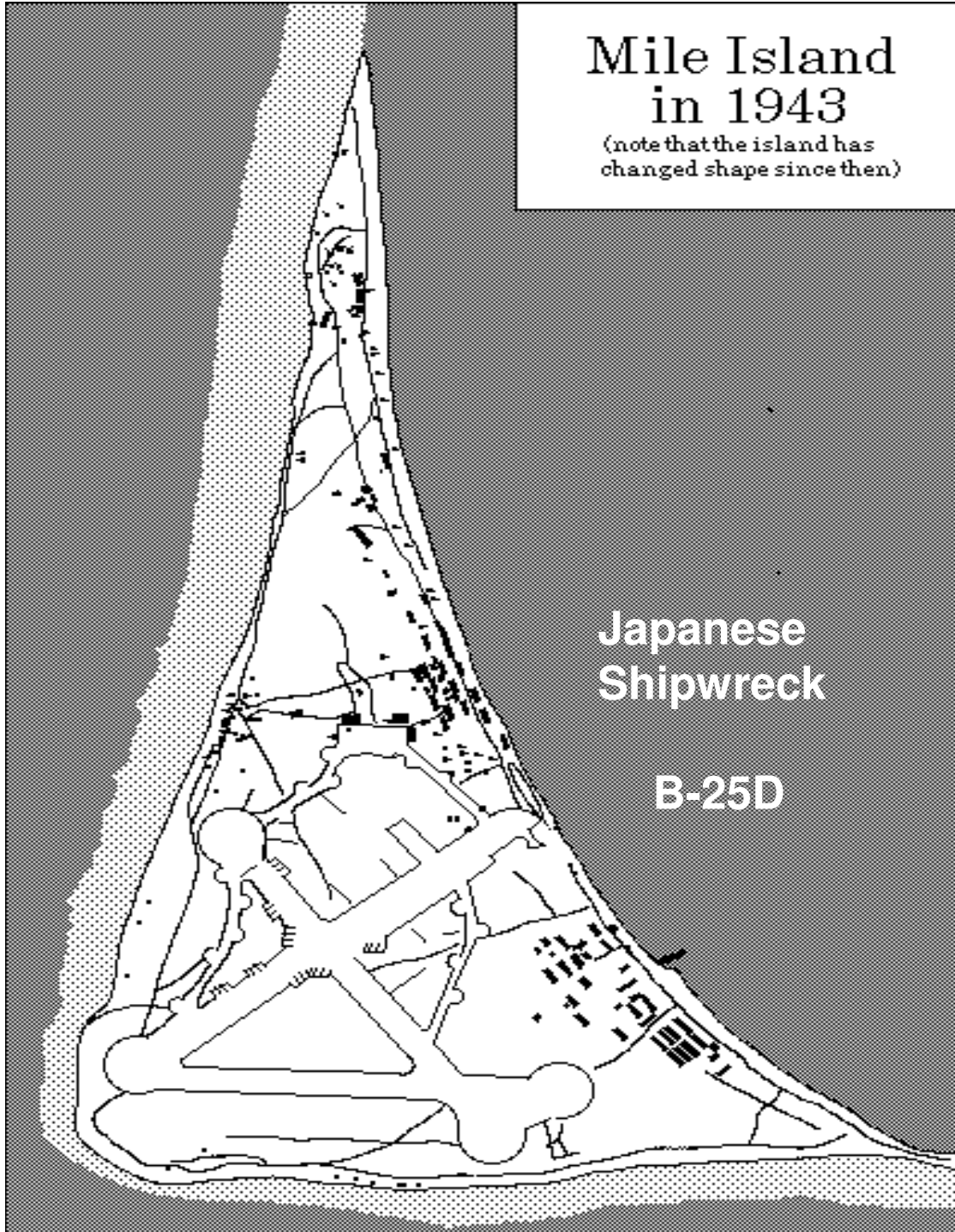
Mile Island in 1943

(note that the island has
changed shape since then.)

Japanese
Shipwreck

B-25D

Japanese
held Mili
Island in
1943





Docks

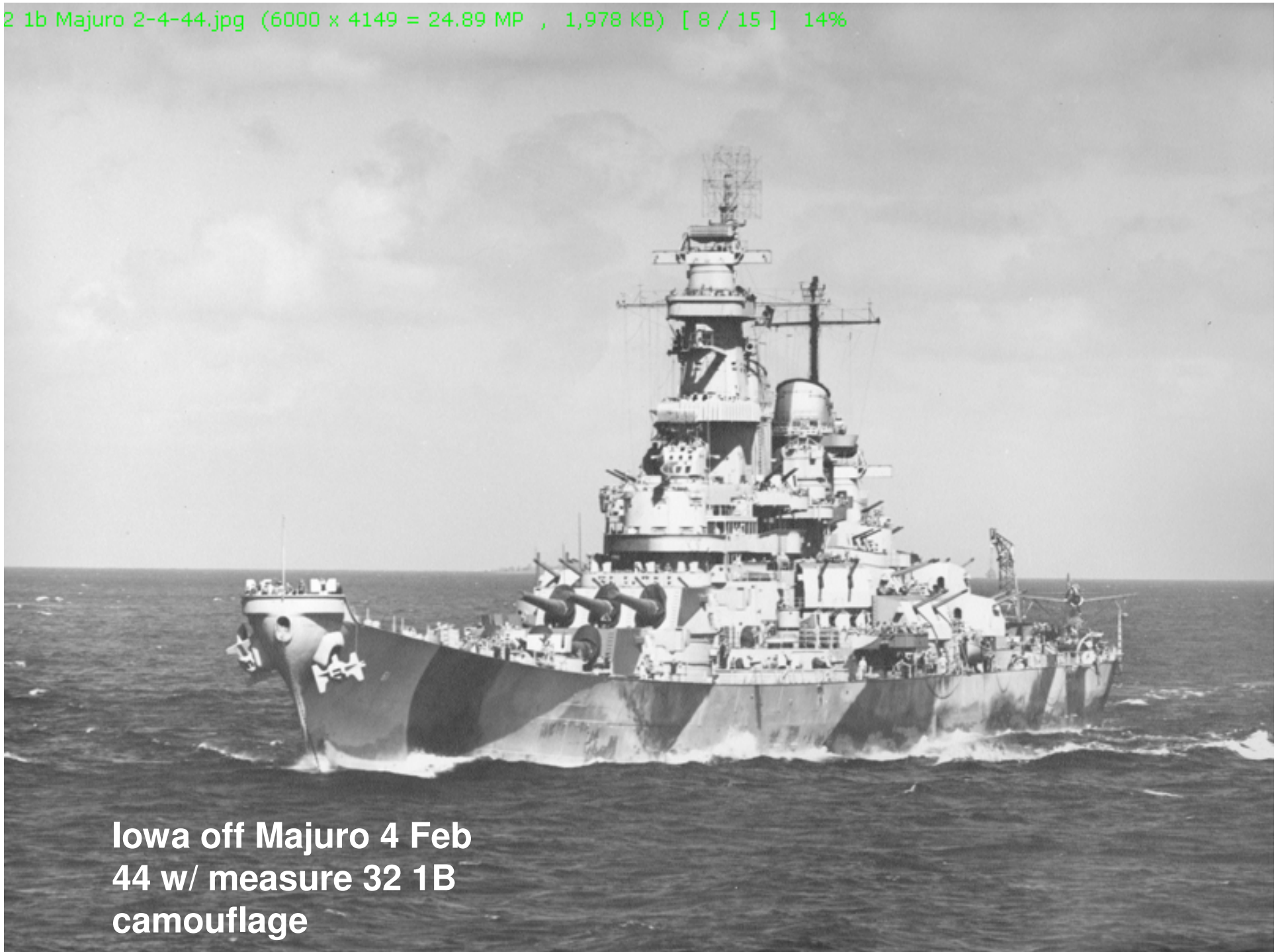
Mili Atoll, 1944

PacificWrecks.com

**USS Iowa BB 61 in
the Marshalls 24
Jan 44**



2 1b Majuro 2-4-44.jpg (6000 x 4149 = 24.89 MP , 1,978 KB) [8 / 15] 14%



Iowa off Majuro 4 Feb
44 w/ measure 32 1B
camouflage



Minor damage to Iowa's
Nr 2 turret while shelling
Mili Atoll on 18 Mar 44



**Locals home built over WWII
Japanese bunker**



**Japanese
glass fishing
balls**



127mm Dual
Purpose gun in
the jungle



**Japanese 120mm Coastal
Defense gun in the jungle**



**Shery and
Japanese
127mm Dual
Purpose gun**



**Small Shore Defense
gun in the water**



**WWII Japanese
bomb cart wheels,
now boat anchor**



**A6M Zero
engine**



**A6M Zero
fuselage and tail**



**A6M Zero 20mm
wing cannon**

Mitsubishi G4M Betty Bomber



7 crew, 265 mph, 29k,
3750 mi, 1x20 mm & 4
7.7 mm guns, bombs
or torpedoes

**G4M Betty
Bomber nose area**





**G4M Betty bomber
stbd wing, missing
engine**

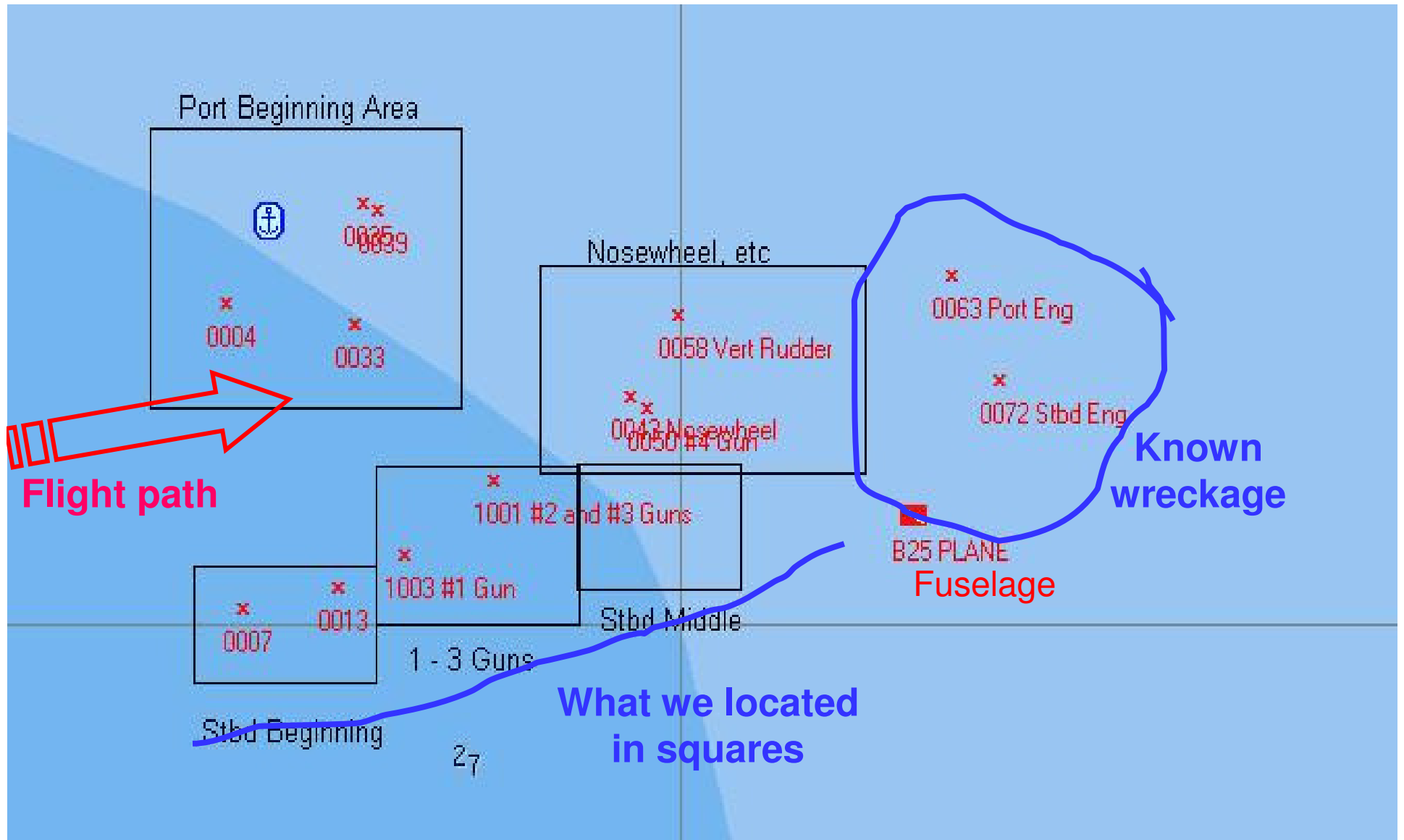
North American B-25 Mitchell Bomber



1942 Doolittle raid on
Japan from USS Hornet

5 crew, 2x1700hp,
275mph, 1300mi,
24k', 1x75mm,
16x50cal, bombs,
rockets, 9800 ea

B-25D Mitchell Search Site Map





**B-25D stbd front in
25', nose cone
missing , cockpit open**



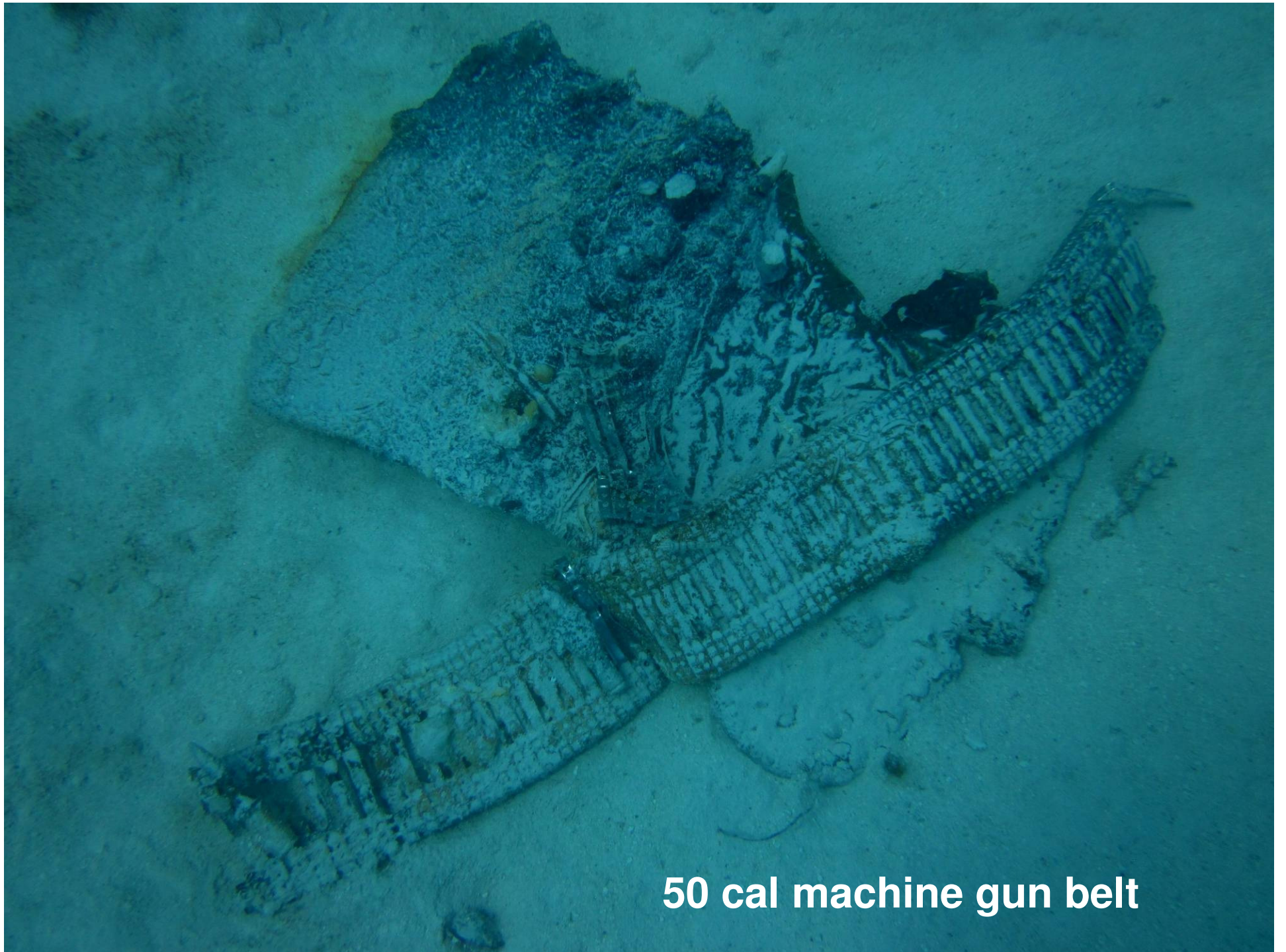
B25 port front



**B-25D cockpit,
yokes, throttles**



B-25D port waist 50 cal machine gun

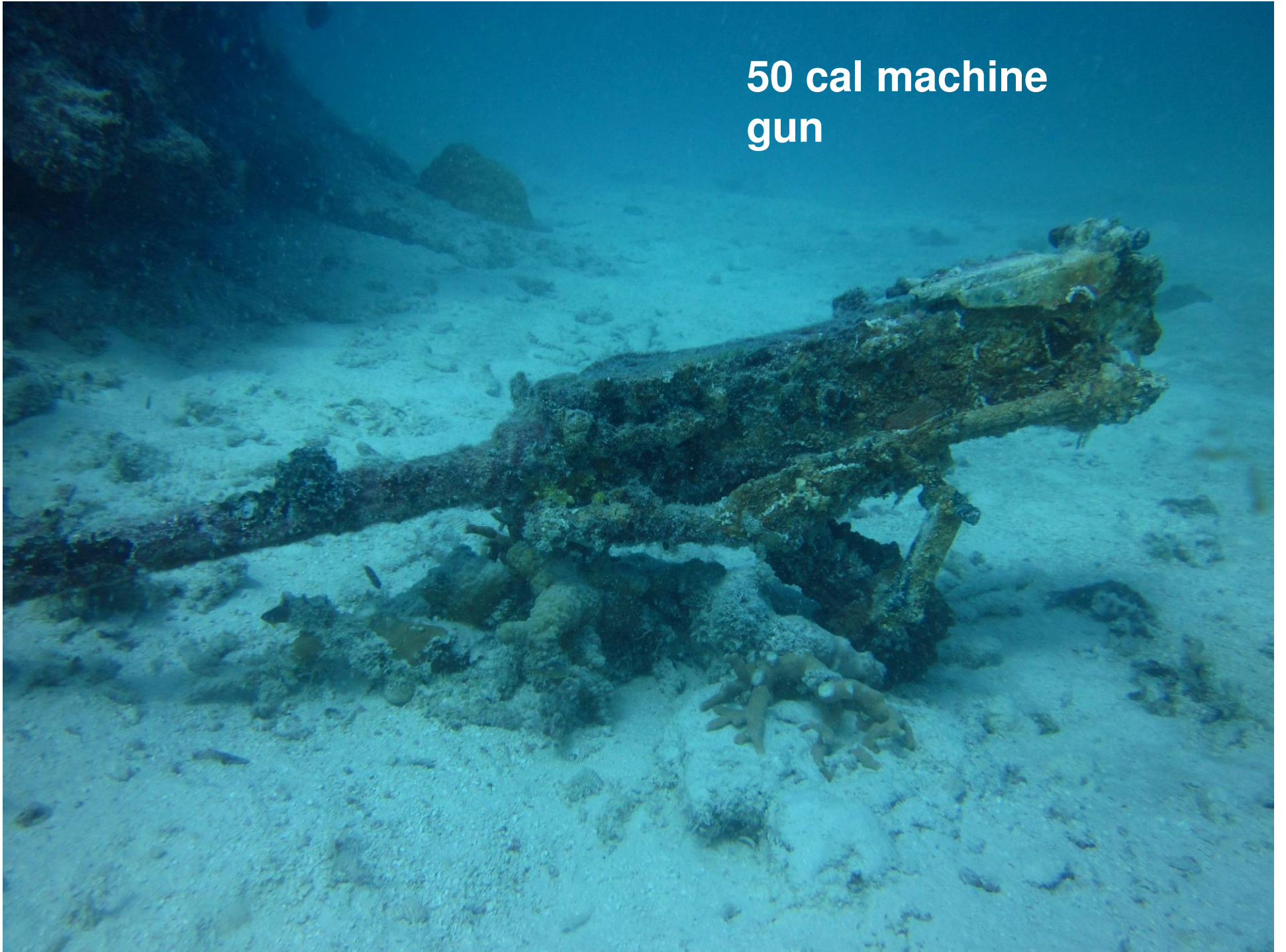


50 cal machine gun belt

**B-25D 50 cal
dorsal twin
mount**



**50 cal machine
gun**



Jaluit Atoll

Very rare TBD
Devastators

Pinglap

Jaluit Atoll

Medyai

Medyado

B-25
Mitchell

Agidyen

2 H8K
Emilys

Emidj Jap sea
plane base

Aineman

Elizabeth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Ships

Image Landsat

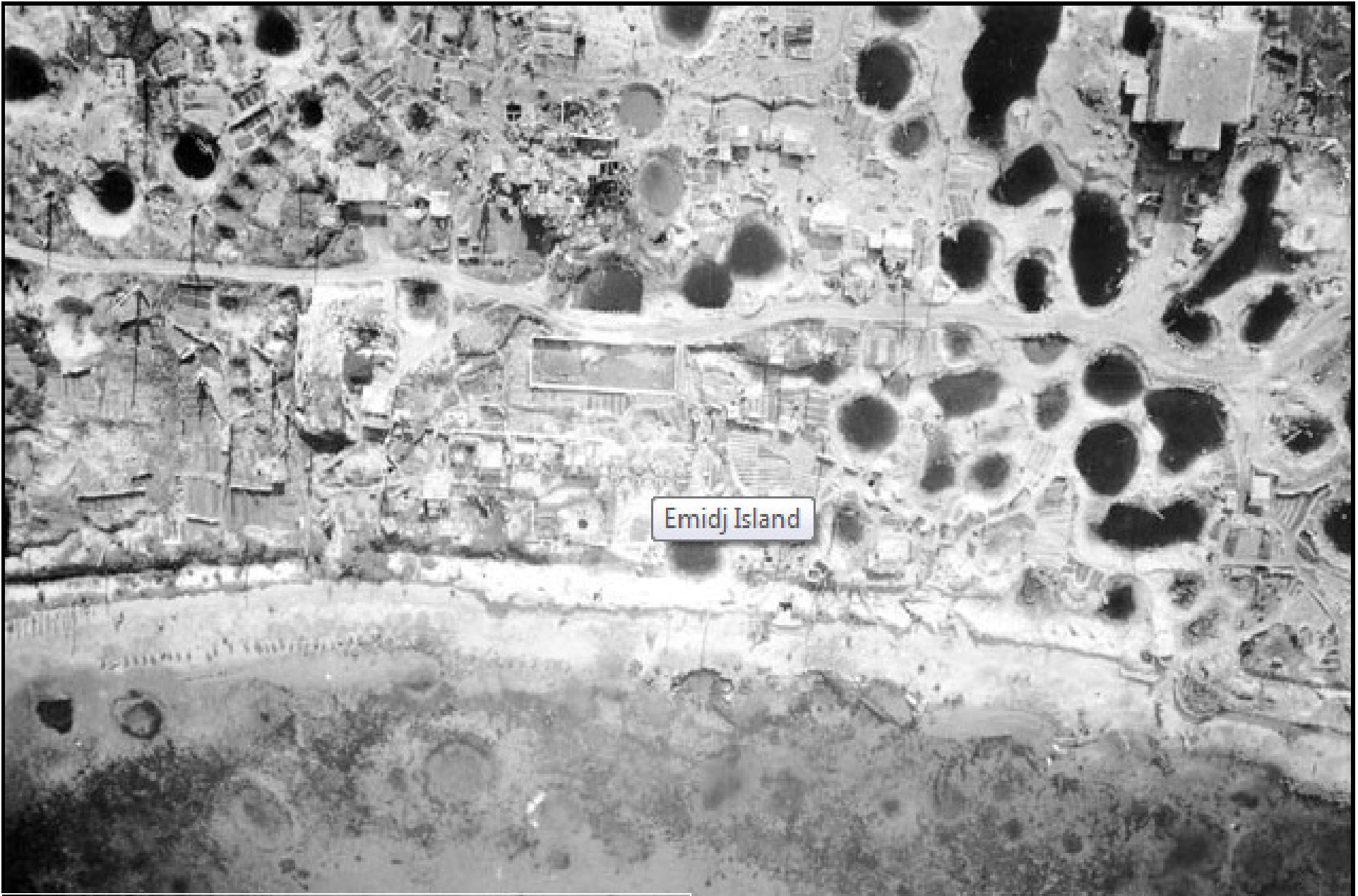
Jap HQ base

Jap ba Generators

Jaluit Island

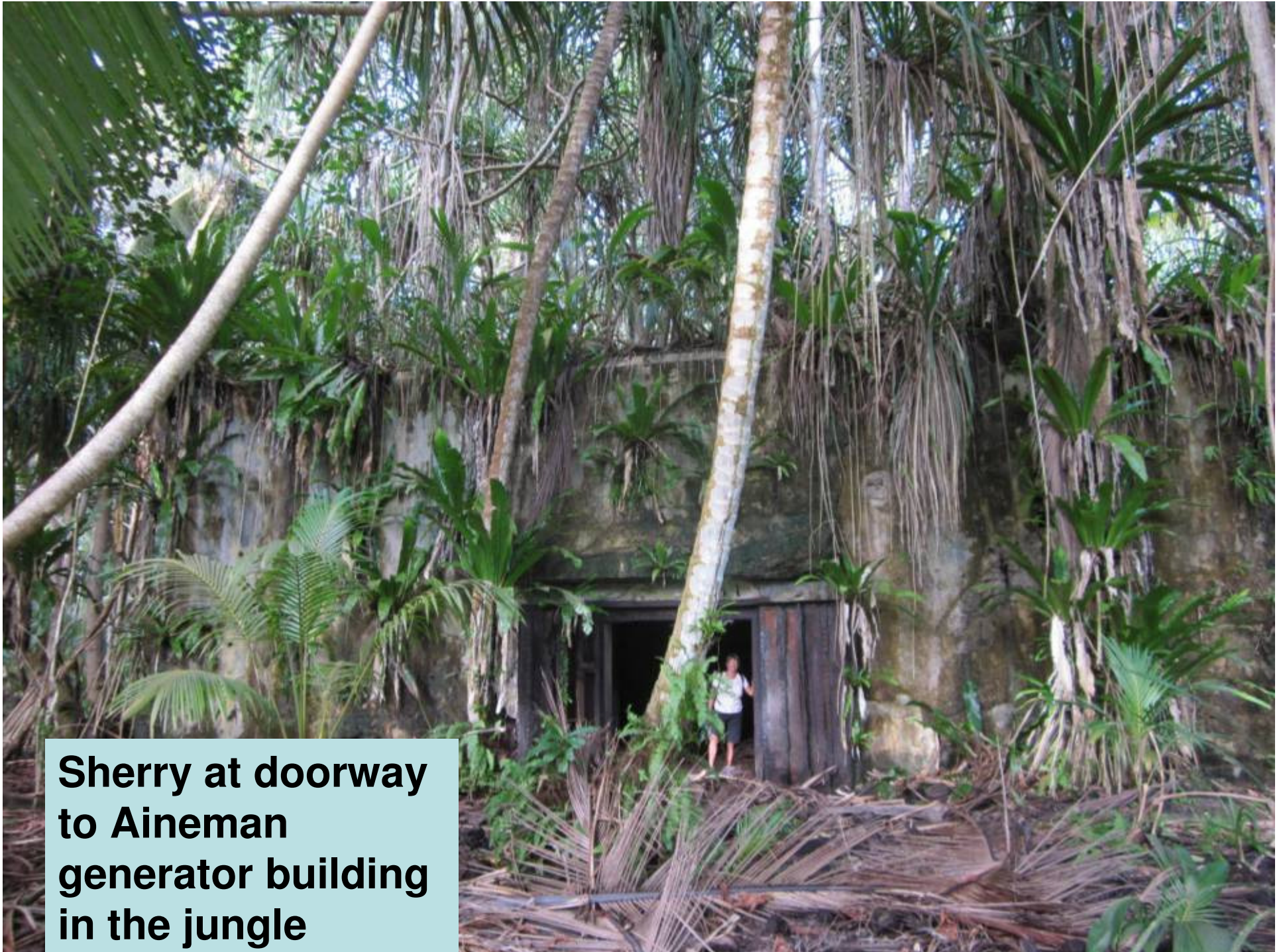
Google earth

Bogenaga



Emidj Island

Emidj Island, 24 Jun 1945




**Sherry at doorway
to Aineman
generator building
in the jungle**



**Grounded Japanese cargo
shipwreck**



**Sherry inside 1880s
German composite trading
ship at 90', off Jaluit Island**



**Sherry at stern of WWII
Japanese tug boat in 30',
Jaluit harbor**



**SPaws anchored off
Japanese sea plane
base, Emidj Island**

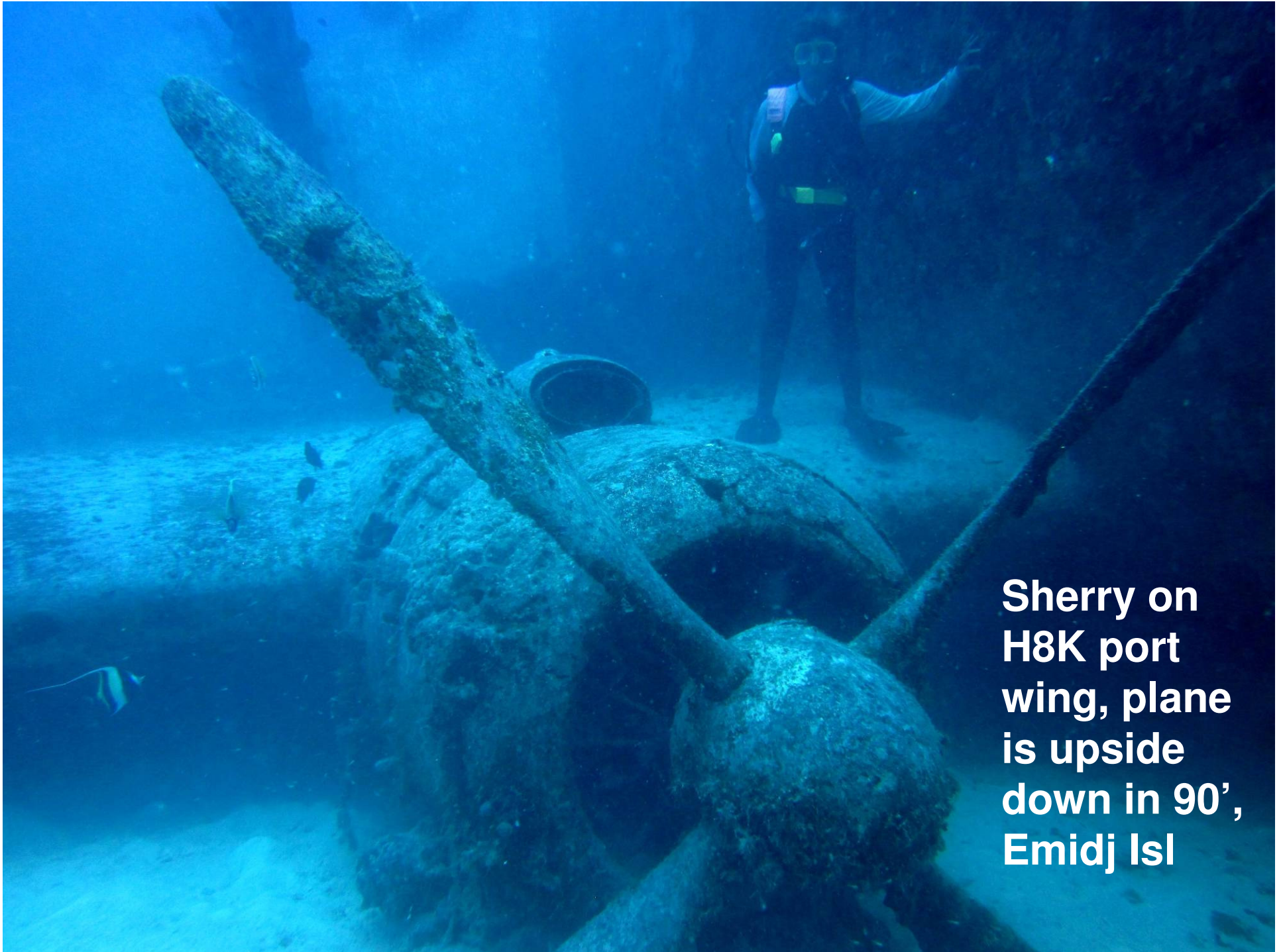
Kawanishi H8K Emily Flying Boat

10 crew, 4x1850hp,
290mph, 4460mi, 29k',
5x20mm, 4x7.7mm,
bombs, torps, 167 ea



Huge 125' wingspan,
64 troops, 29 staff
officers, very well
armed and longest
range






**Sherry on
H8K port
wing, plane
is upside
down in 90',
Emidj Isl**



**H8K
interior
seat**



**H8K 4 blade
prop and
engine**

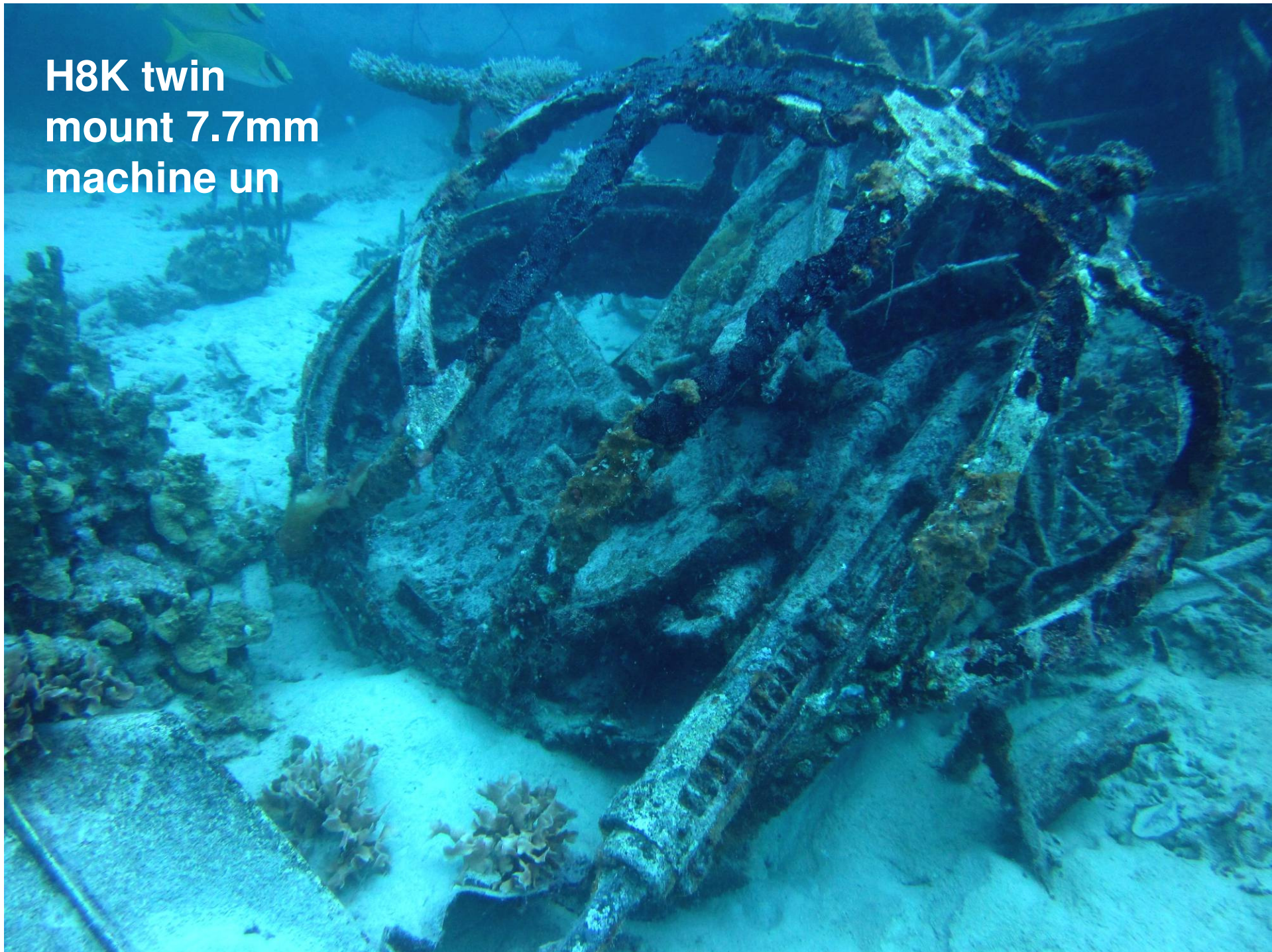
An underwater photograph showing the nose and underside of the aircraft carrier H8K Emily. The ship's hull is heavily encrusted with coral and other marine life. A diver is visible in the background to the left. The water is clear blue.

**H8K Emily
nose and
under side**



**H8K 20mm tail gun,
one of 9 guns onbd**

H8K twin
mount 7.7mm
machine un



**H8K stbd float,
upside down**



Douglas TBD Devastator Torpedo Bomber



3 crew, 900hp,
205mph, 415mi,
19.7k', 2x30cal,
torps, bombs, 129 ea

Douglas TBD Devastator Torpedo Bomber

Early rare torpedo bomber, of only 70 operational 40 lost at Midway 4 Jun 42, now only 4 known, 2 lost 1 Feb 42 on Yorktown CV-5 Jaluit raid





**TBD in 45', engine
in fore ground,
west Jaluit Atoll**



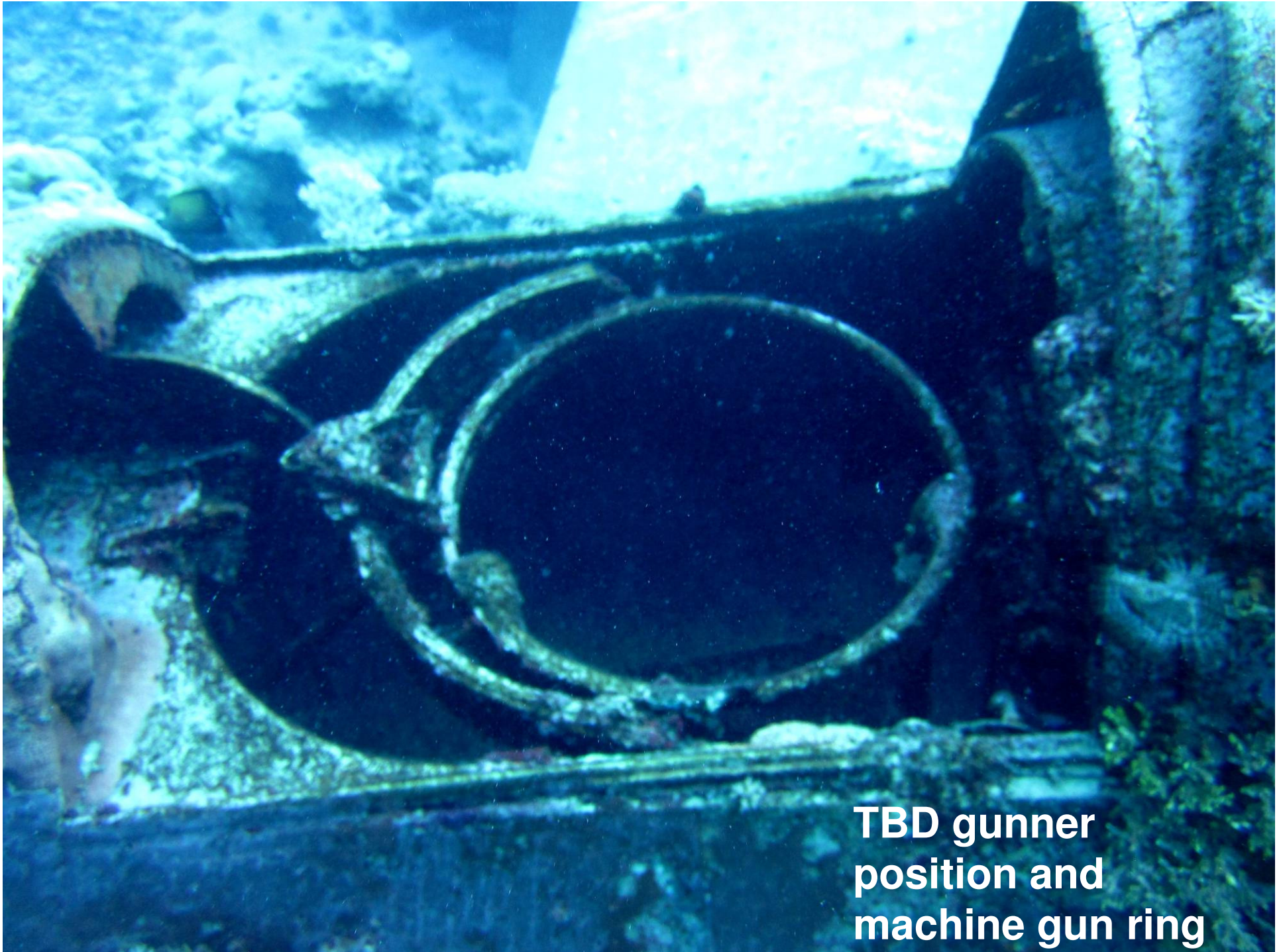
Unique TBD wing surface ridges, Sherry inspecting bomber and gunner's seats



**TBD from stbd aft, Sherry
inspecting gunner's
position, flaps deteriorated**

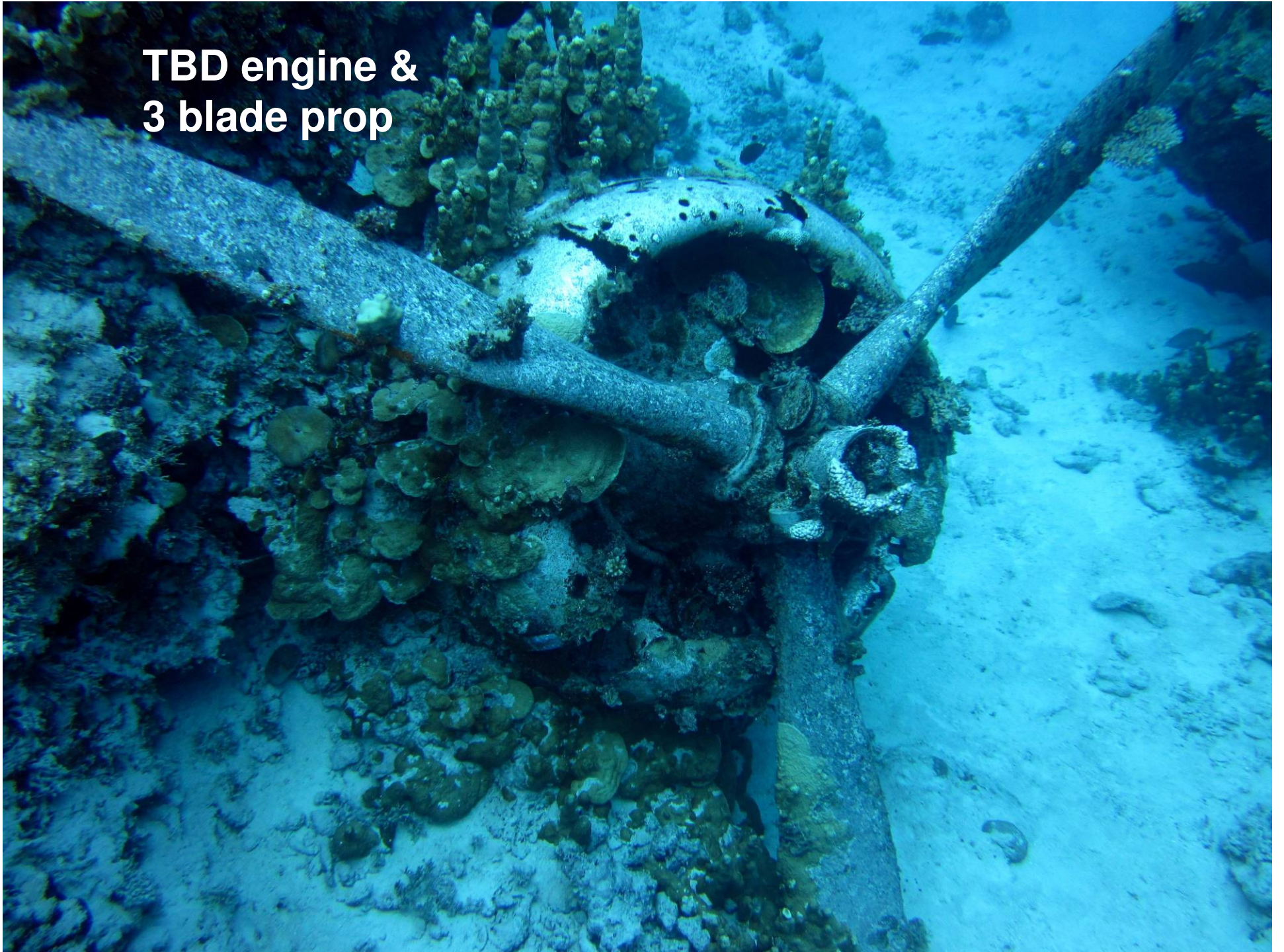
**Dave inspecting
TBD bomber and
gunner seats**





**TBD gunner
position and
machine gun ring**

**TBD engine &
3 blade prop**



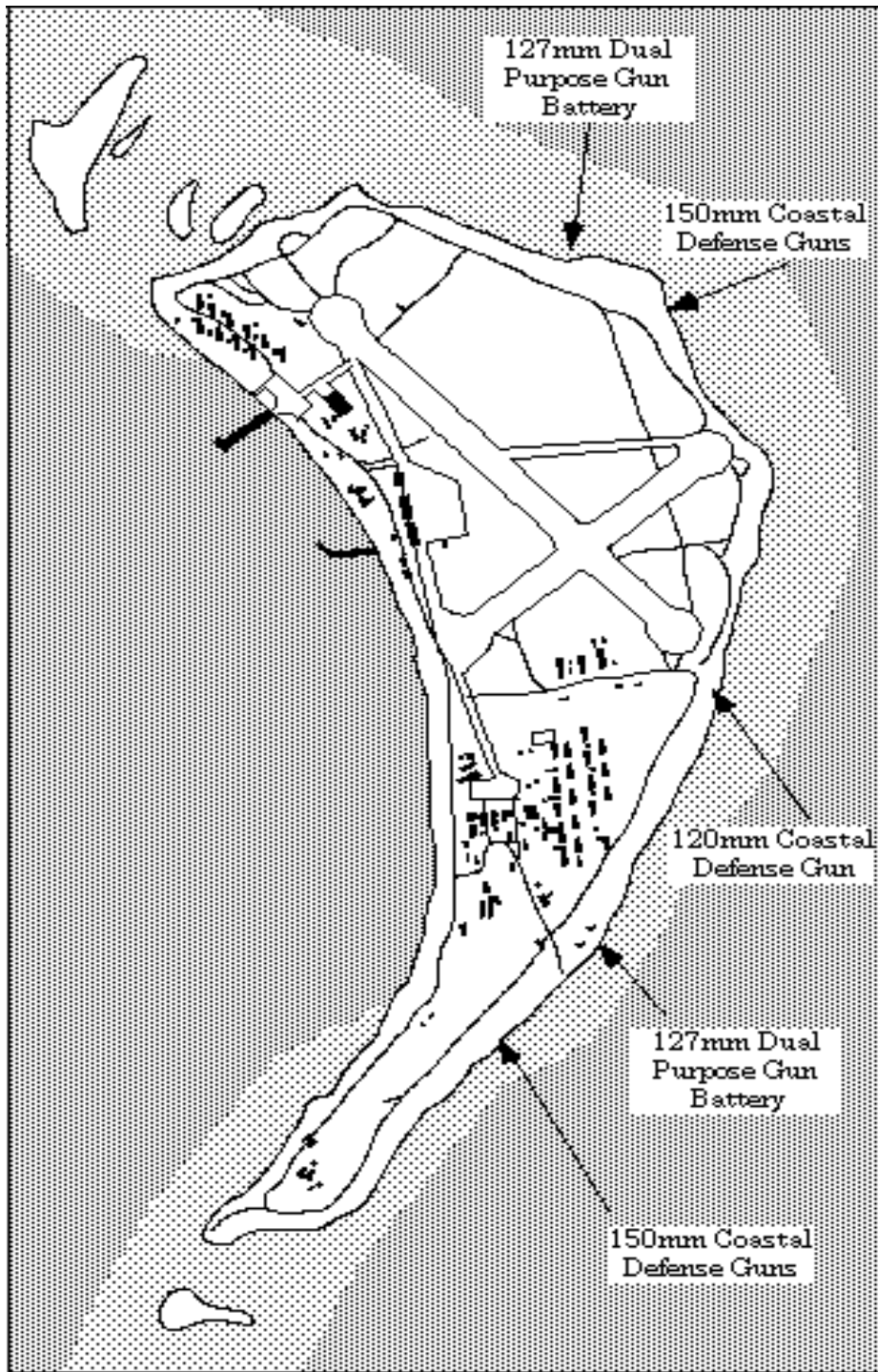
Deep TBD
at 120'



**Deep TBD at 120', pilot
and bomber's seats, gun
sight, antenna pylon**



**DUSTIN
JOHNSTON
PHOTOGRAPHY**



Layout of
Wotje during
WWII, SPaws
did not visit
due to high
cost

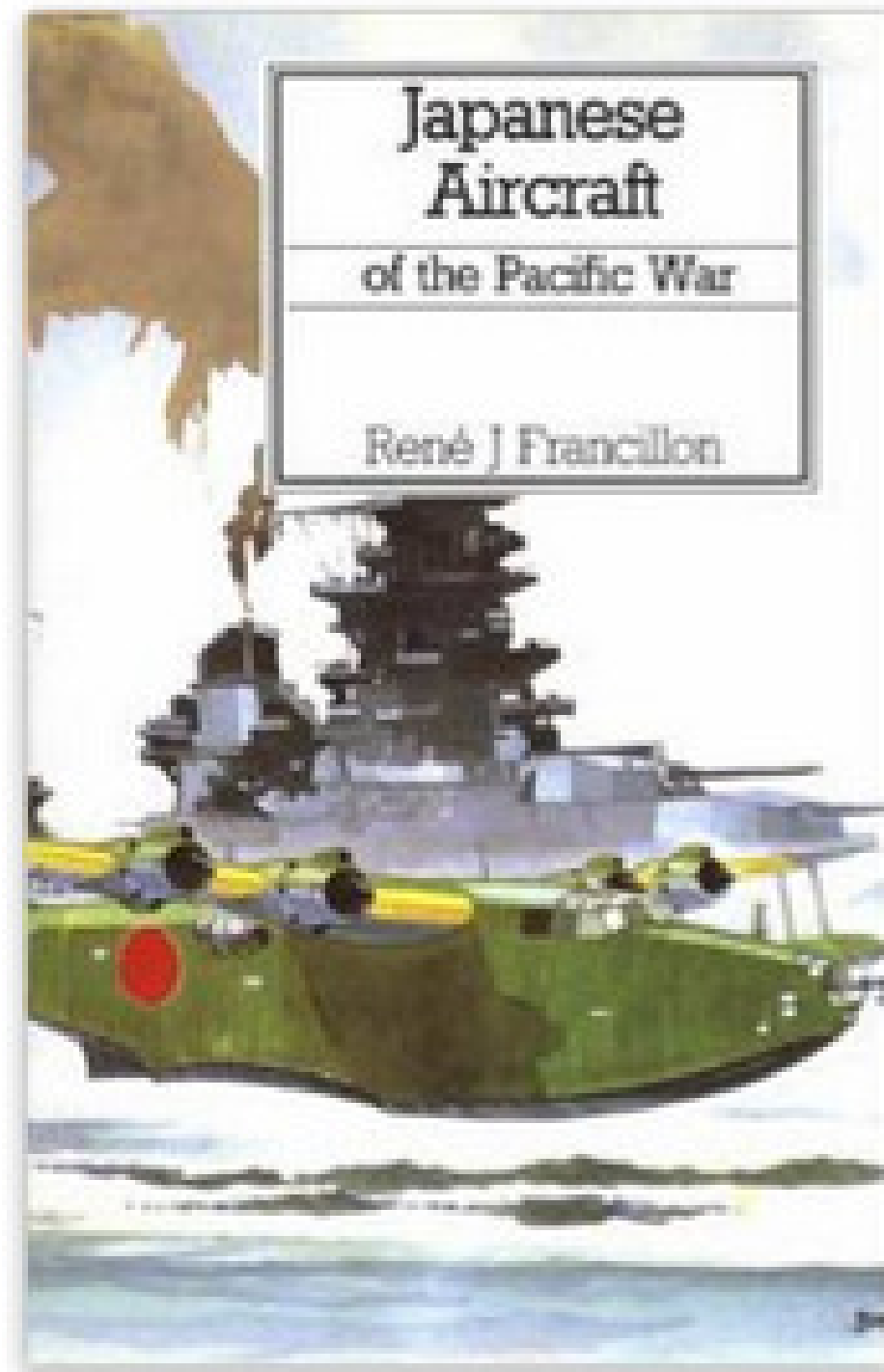
Wotje Island
24 Dec 43



PacificWrecks.org

**Best Japanese
Aircraft Book –
black/white pics
Rene Francillon**

**Available on
Amazon.com**



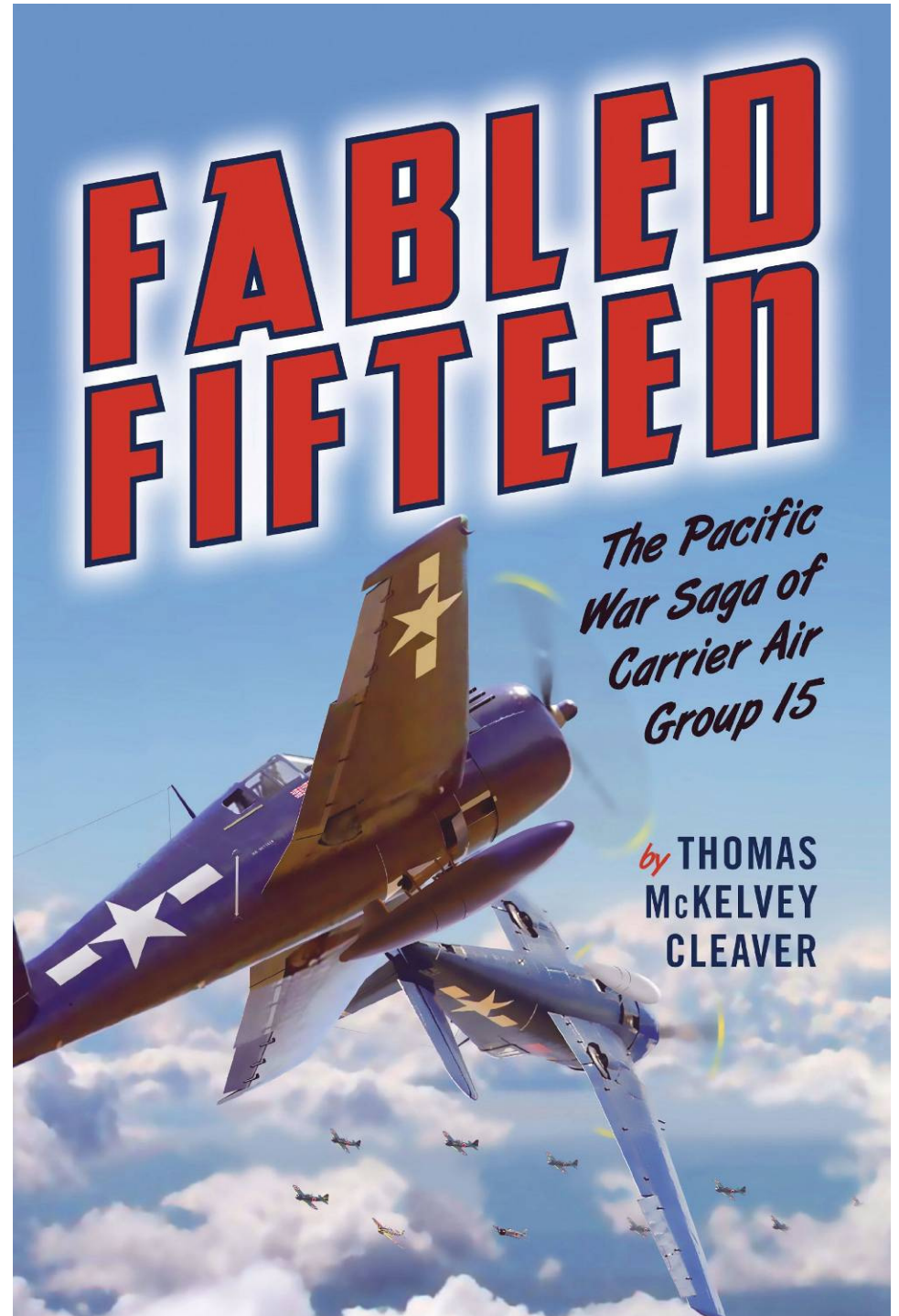
Great World War II Aircraft Book

All Nations – Color Jim Winchester



New Book on WWII history of Air Group 15

Great Reviews
Available on
Amazon.com,
eBook or Hardcover



More here...

<http://svsoggypaws.com/Presentations>

<http://svsoggypaws.blogspot.com>



ssca.org

The End

Dave & Sherry McCampbell
www.SVSoggypaws.com/Presentations