

#### **Gertrude Tompkins Expedition**





Orientation and Training Briefing

#### Today we will cover four topics



- Background on the disappearance
- Research findings
- Logistics and search management
- Searchers



## Background



## The WASP were a vital part of the WW II war effort

- Women Airforce Service Pilots from 1942-44: 25,000 applied, 1074 served; 300 still living
- Based at 120 Army Air Bases in US
- Ferried 78 types of war planes Fifinella over 60 million miles
- 38 killed in service



**WASP** wings



Only one is still missing:



**Gertrude "Tommy" Tompkins Silver:** 

## Tompkins disappearance is one of the great remaining mysteries of World War II

Disappeared 26 October 1944

 Took off from Mines Field (now LAX) headed for Palm Springs

 Took off westbound into the wind, intending to turn 180 degrees

- Never seen again
- Search began 3 days late due to paperwork foul-up
- No trace found in search on land or sea



## Tommy had only been married a month when she disappeared

#### TROTH ANNOUNCED OF MISS TOMPKINS

Member of Wasps to Be Wed to Staff Sgt. Henry Mann Silver 2d of the Army

Special to THE NEW YORK Traces,

SUMMIT, N. J., Nov. 30-Mr. and Mrs. Vreeland Tompkins of Summit and Bridgehampton, L. I., have announced the engagement of their daughter, Gertrude, to Staff Sgt. Henry Mann Silver 2d, USA, son of the late Dr. and Mrs. Lewis Silver of New York.

Miss Tompkins, who is now serving with the Women's Airforce Service Pilots, was graduated from New York Preparatory School and from the Pennsylvania School of Horticulture for Women. She is a granddaughter of the late Mr. and Mrs. Thomas H. Towar and the late Mr. and Mrs. Samuel D. Tompkins of Jersey City, N. J. Mrs. Guy H. Whittall of Southern Pines, N. C., and Mrs. L. T. Wade of Olean, N. Y., are her sisters.

Sergeant Silver was graduated from Phillips Andover Academy and from Yale University. He is a nephew of Dr. Henry Mann Silver of New York. The prospective bridegroom was with the Columbia University Press before entering

active service.



Tompkins and her father and new husband, October 1944

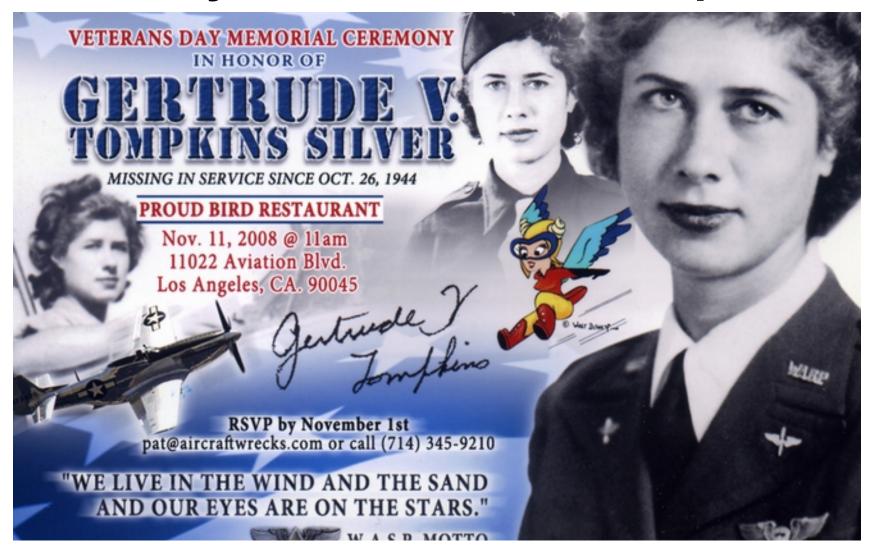


Plaque for Tompkins at the LAX Flight Path Museum

#### The New York Times

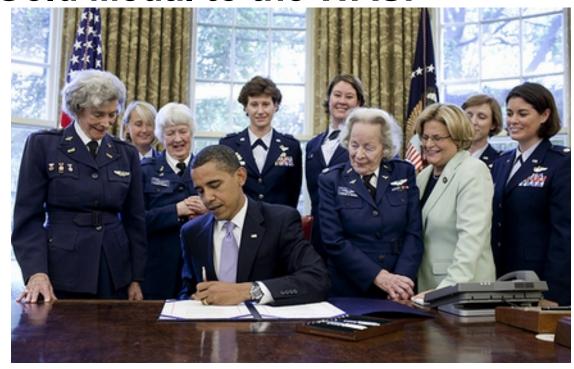
Published: December 1, 1943 Copyright © The New York Times

# Tompkins' story is still kept alive by her family, Pat Macha and the press



#### The WASP story is alive, too: In July the President signed a bill awarding a Congressional Gold Medal to the WASP





#### President:

"The WASP answered their country's call in a time of need, while blazing a trail for the brave women who have given and continue to give so much in service to this nation since."

## Research Findings



## "Tommy" Tompkins had earned her wings

- "A good pilot, a neat gal, and followed the Army flight rules carefully"
- "Very stable"
- "A very nice high class girl—she and I both graduated from fighter pilot [pursuit] school, and we both thought we were hot!"
- 32 years old in 1944
- Had 451 hours as 1<sup>st</sup> pilot or solo student + 302 as other pilot or student
- Had 46 hours in this type and 17 hours in this model
- Was IFR rated but only had 37 total IFR hours and only 3 in the last 6 months; none of these as 1<sup>st</sup> pilot





Statement by a WASP pilot who took off just ahead of Tompkins Dorothy Hopkins Henesy

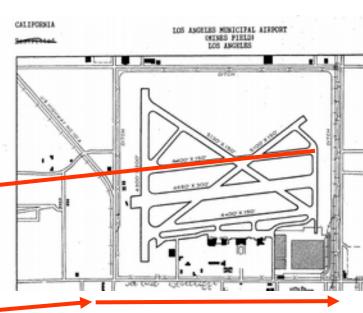
STATEMENT

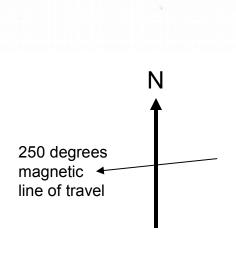
4 November 1944.

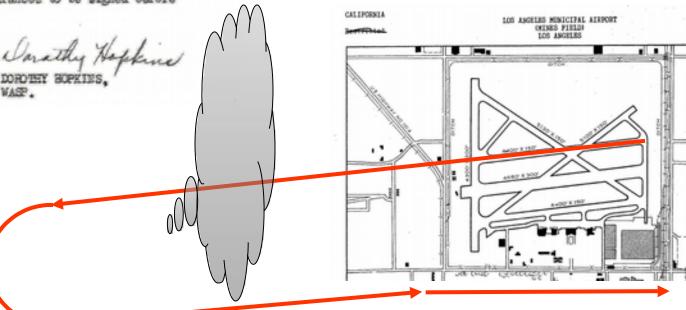
I, Dorothy Hopkins, departed from Inglewood, California, 26 October 1944 about 1530. After leaving the end of the runway, I was in the haze and climbed straight shead to approximately 2000 ft. before breeking out of the haze. I, then, made a left turn to 70° and was on the beam. At 2500 to 3000 ft., it was impossible to see the ground or water. The tops of the mountains were visible.

On 26 October 1944, I saw Miss Gertrude Tompkins at Inglewood while waiting for our clearances to be signed before taking-off.

"Marine layer" fog bank







Tommy was delayed by repair to the

door (canopy?) of the plane

STATEMENT

3 November 1944.

WASP Tompkins could be described as follows: distinctive looking, tall, quiet, approximately 5 ft 6 or 7 inches tall, between 30 and 35 years of age, brunette with gray streaks, and was wearing feded olive drab coveralls with painted Air Corps insignia on it.

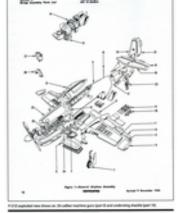
I noticed her name on her parachute and some of her luggage.

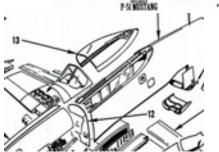
When WASP Tompkins first came to the field, she was informed of the bent door of her aircraft and that it would take twenty minutes or so to fix it. Aircraft was taken across strip into an open area where it was going to be repaired. She stated at this time that she was in no particular hurry since she was only going to Palm Springs. I can positively say that aircraft taxied off of line to runway waiting for clearance at approximately 4:00 p.m. on 26 October 1944.

This aircraft had been released by all inspectors before it was accepted by the pilot.

MERIE DOBBINGS. Leadman on Delivery Line,

Mule Cathing







# Three planes took off but only two came back over the field



100	INCOMING TESSAGE	
4	HEADQUARTERS ARMY AIR FORCES FOR ACTION	
	OFFICE OF FLYING SAFETY FOR INFO	
	WINL IN-SALES, MONTH CAROLINA FOR FILE	
E	DATE	
T.W.X.	TELEGRAM ADMINET	
	the second secon	23

PAGE .... 2...

AND EAST TO COLORADO RIVER

LATITUDE FROM COLORADO R'VER EAST TO 111 DEGREES WEST LONGITUDE.

THIS AGENCY SPOTTED SOME POSSIBLE WRECKAGE ON FOUR PEAKS 40 MILES

NORTHEAST OF PHOENIX AROUND 1730 PWT. THIS WILL BE CHECKED IN THE

MORNING AT SUNRISE 2 NOV BYMEN ON HORSEBACK. YUMA ARMY AIR BASE IS

SEARCHING ON AREA BETWEEN 114 AND 115 DEGREES WEST LONGITUDE NORTH

FROM THEIR BASE TO 34 DEGREES NORTH LATITUDE

EL CENTRO NAVY IS COVERING AREA FROM THEIR BASE NORTH TO SHAVER SUMMIT

AS REPORTED BY CRASH TRUCK ON END OF RUNWAY ANOUND VERIFIED THROUGH
TRANSCRIPTION OF CONTROL TOWER CONVERSATION. LINE FOREMEN FOR NETW// NORTH
AMERICAN - G. L. LAIDO REPORTED THAT THREE/F/E/F P-51S
INCLUDING SUBJECT AIRCRAFT TOOK OFF TOGETHER ON RUNWAY 25, BUT ONLY
TWO SEEN TO CIRCLE BACK ACROSS FIELD ON COURSE TO PALM SPRINGS. OCEAN
APPROXIMATELY 1 1/2 MILES OFF END OF RUNWAY 25, DELAY IN DISCOVERING
THAT AIRCRAFT WAS MISSING RESULTED FROM FACT THAT FLIGHT PLAN DID NOT
REACH AIRWAY TRAFFIC CONTROL CENTER. FAILURE OCCURED IN TELEPHONE
TRANSMISSION OF FLIGHT PLAN TO LOS ANGELES RADIO CONTROL TOWER, NOT YET

DETERMINED WHETBER MISTAKE BY PERSON TELEPHONING FLIGHT PLAN OR TOWER
IN RESERVING FLIGHT PLAN. PILOT'S FATHER NOTIFIED - MR. VREELAND

37664 In 44275

# Interviews by MAST with 3 WASP never before contacted re the case revealed:

- CHIRCRAFT SEAFCH TEAM

  AND THE SEAFCH TEAM

  M.A.S.T.
- These three were likely present on the date of the accident
- Most WASP turned left (south) when taking off into the wind at Mines Field, but some occasionally turned right (north)
- Some WASP would fly straight up thru fog, but some would turn quickly to escape the fog bank



Rosa Lea Fullwood



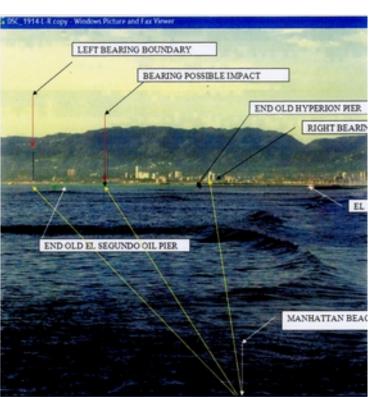
Jean Landis



Barbara Willis Heinrich

## A possible eyewitness to the crash places the plane NW of Manhattan Pier





#### Possible causes of the crash

- Disorientation in fog bank
- Distraction from malfunctioning canopy
- Center of gravity problem caused by full fuselage gas tank behind pilot
- Engine failure
- Other

#### Chuck Yeager autobiography:

THE ULTIMATE HIGH

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into the cockpit. You ask him if anything is wrong, but there never is, so you crawl in and strap yourself to your seat. A thick — piece of armor plating protects your back; behind that is an eighty-five-gallon tank of high-octane aviation gasoline. You look up at the sky, thickly overcast as usual, and check out the instruments and especially the oxygen system. You'll be flying at 30,000

for a most of the day Vonder about most for make about head





Report No. NA-5865

RESTRICTED

FUEL SYSTEM Sec IV, Par 14

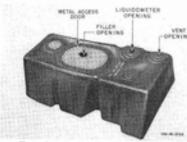


Figure 212—Fuselage Auxiliary Fuel Tank— Top View

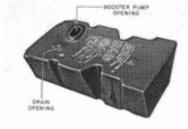


Figure 213-Faselage Auxiliary Fuel Tank-Battem View

lower flange of the front spar and connect vent line at the outboard end of the tank.

- 7. Raise the aft end of the tank into position. While the men on the ground are holding the tank in position, the men on top of the wing should remove the stud connector tools and install washers and nots on the stud fittings. Then install plugs in the stud fitting holes in the top of the wing.
- 8. Secure the filler neck and fuel gage adapter to the upper surface of the wing. If the left tank is being installed, attach elbow to boss in fuel gage casting, and then connect the curbureter vapor return line to the elbow.
- Reinstall cockpit floor and the center wing-tofuselage fairing.
- Connect the fuel hose from the booster pump to the spar fitting, and make electrical connection to the booster pump.
- 11. Check to see that all connections are secure. Then place washers over the 3 stud fitnings on the bottom of the tank. Thread the wires from the studs through the proper holes in the tank door. Raise door into place and attach to the wing with bolts and screws. Remove the wires and install washers and nots on the stud fittings. Install the plugs in the stud fitting holes in the tank door. Connect handline besid from some a tank late. The connect handline besid from some a tank late. The connect handline besid from some as tank late.

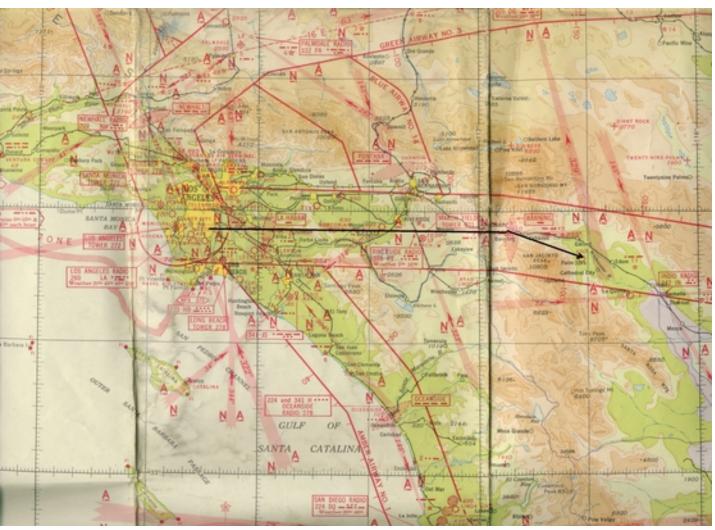
mercury test stand at a pressure of 2 lbs./sq. in. The test is made by connecting the line from the test stand to the main fuel tank vent line at the trailing edge of the wing. The shot off valve control handle should be in the "orv" position. The filler neck on each tank should be plugged. Run test on each tank separately. An air valve is used to regulate the air for proper pressure. The pressure must be maintained for a period of 15 minutes without any perceptible drop in pressure.

#### 6. FUSELAGE AUXILIARY FUEL TANK.

(1) DESCRIPTION. — The 85 gallon self-sealing auxiliary tank is constructed to fit into the area of the fuselage directly behind the pilot's seat. A hooster pump, fitted with a self-dearining outlet, is attached to the bottom of the tank, which is independently writed. The direct ending gage is goose-necked so that it can be seen from the pilot's seat. The drain line ends in a petock on the left underside of the fuselage, just forward of the radiator; a draw fastened door covers the opening. The filler neck cap is on the left side of the fuselage, just forward of the insignia. The vent outlets on the night side of the fuselage, immediately below the insignia. An access door is built into the top of the tank.

(2) REMOVING PIRELAGE ALIVITIARY STREET

# Tompkins was headed for Palm Springs



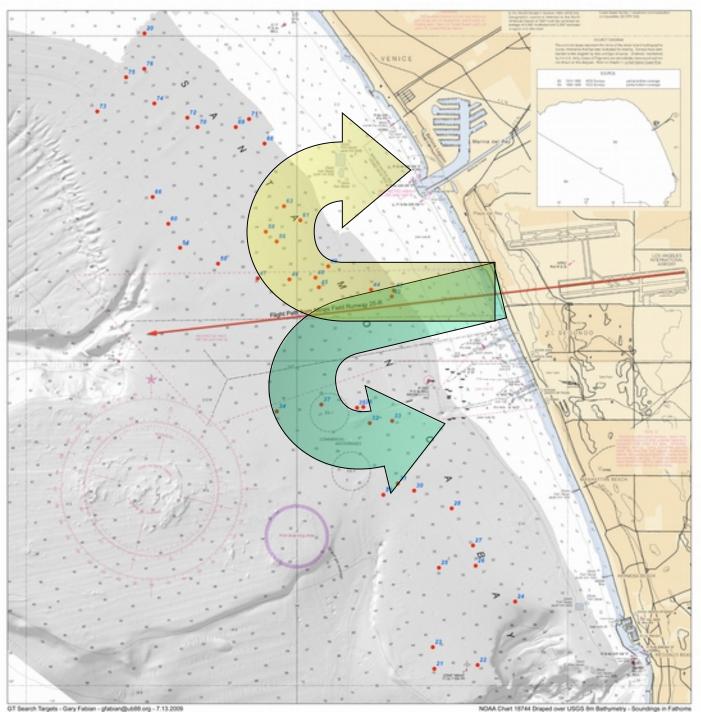


She could have crashed on land, and there is even a report, now discounted, that her plane was found in the mountains.

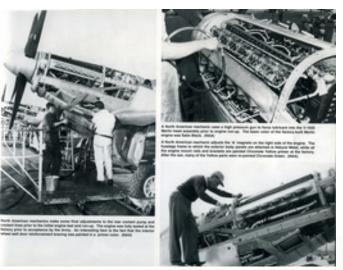
The target search area is off LAX P-51D Mustang Search Area Santa Monica Bay California Gary Fabian www.ub88.org February 21, 2009 LOS ANGELES 33 26 348 33 55.286 118 27.786 CRESTRICTED AREA rgets identifi Individual offshore Chevron NOAA Chart Eyewitness initially indicated to Pat Macha a bearing of 290-300 magnetic from Manhattan Beach Pier. He later adjusted this to 318 based on the relative location of the old El Segundo Pier 5144 - 1948 of Byovenice



The search is driven by anomalies spotted on **USGS** underwater databases within the general target area



## The target: P-51-D Mustang

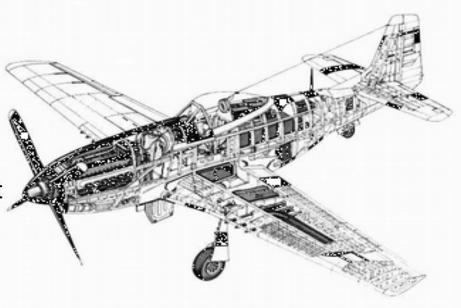






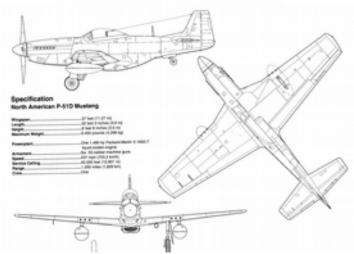
## Key items that might survive:

- Wheels and tires
- Engine, esp. crankshaft
- Machine guns
- Seat armor
- Note: no drop tanks



# North American Aviation stamped most of its plane parts











# The targets underwater will look rather different













A romantic view

#### Pieces may be hard to spot...







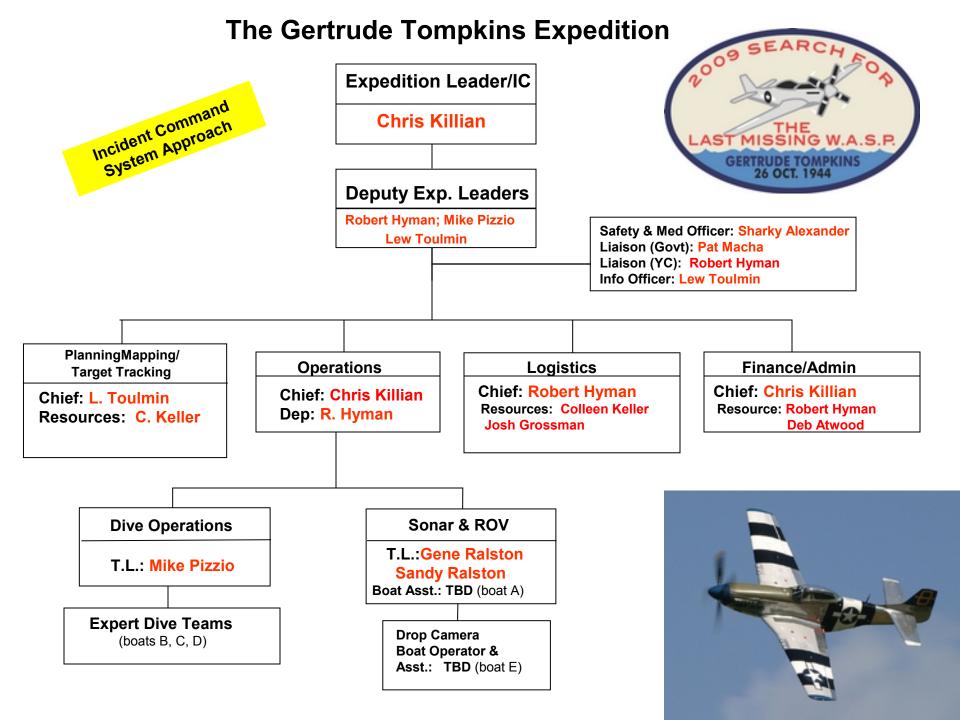




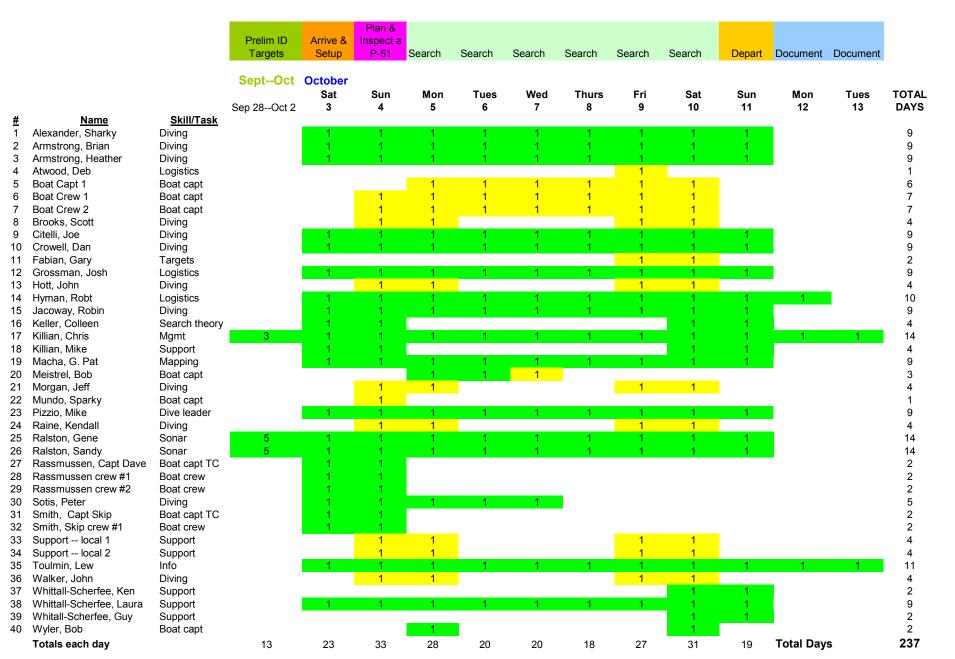
...so check each site carefully

## Logistics and Search Management

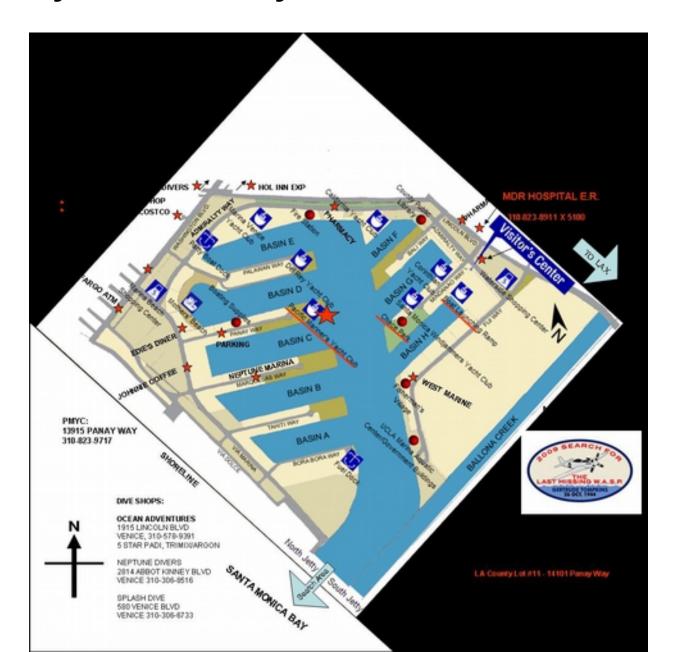




#### The Team will deliver hi time on task



#### The primary search facility in MDR is Pacific Mariners YC



To MDR

#### **Locations Near King Harbor Yacht Club**



## **Key instructions**

- Safety first
- Authorities Having Jurisdiction have been advised of our search
- Be careful with the King Harbor & Pacific Mariners YCs and other donated, rented and loaned facilities, RVs and vehicles
- We will all sign liability waiver forms
- Refer all press and public inquiries to the press relations officer – Toulmin
- Filming and picture taking will be done, there will be a writer from Smithsonian Air & Space Magazine — & other outlets--if you do not wish to be filmed or mentioned please advise





Safety last

#### Searchers



# The search has several key organizational relationships



Aircraftwrecks.com, led by Pat Macha, has been researching the Tompkins case for 11 years and has helped keep interest alive





UB88.org, led by Gary Fabian, found California's only German submarine – one of the state's most elusive shipwrecks -- and pioneered the methods used in the Tompkins case



MAST was formed after the Steve Fossett case, helped find N2700Q in AZ, and is working other "cold case" aircraft disappearances



The Pacific Mariners Yacht Club is the "friendliest YC in MDR" and has kindly allowed us to use their facilities and slips during the search. Thanks!



King Harbor Yacht Club will generously allow use of their great facilities, including parking, dock and various member's vessels. Thanks!

## We have some great team members





Mark "Sharky" Alexander, 21 yrs of diving, PADI Master Instructor, CCR instructor, cave certified, USCG 50 ton Master, paramedic, diver med tech, Military & History Channel



Brian & Heather Armstrong, with 30 years of deep water technical diving, rebreather experience, worked on the recovery of a B-25 Mitchell bomber in South Carolina



Deborah Atwood, Director of Corporate Affairs, Mars Corp., climber, explorer, worked on Search for Steve Fossett Expedition, Society of Women Geographers



Scott Brooks, PADI instructor, trimix experience, wreck and cave diver, member of *UB-88* sub expedition, dove on *Andrea Doria, Triple Crown, USS Wilkes-Barre* 



Joe Citelli, diving 28 years, mixed gas, cave diving, CCR Author, "The Practical Aspects of Deep Wreck Exploration," Worked on Lake Murray B-25 recovery in SC

#### More great team members





Dan Crowell, ex-Seeker, underwater videographer, worked on "Deep Sea Detectives," Military and History Channel, member, the Explorers Club



Gary Fabian, maritime historian, sport fisherman, found the German *UB-88* sub, looked for missing hydrogen bomb off the coast of Georgia, worked extensively on Tompkins case



Josh Grossman, explorer, certified EMT, recently climbed Kilimanjaro, member of the Explorers Club



Robert Hyman, explorer, mountaineer, photographer, climbed to the high points of most US states, led various Explorers Club expeditions, member of MAST



Robin Jacoway, President of DeepOutdoors technical diving equipment firm, CCR instructor, worked on the 2009 *Monitor* expedition

#### More great team members



Colleen Keller, search theorist with Metron Corp., pilot, FAA certified mechanic, SCUBA diver, co-founder of MAST, worked on Fossett search and search for Air France Flt 447 off Brazil



Chris Killian, re-discovered over 100 mis-located planes, SCUBA diver, trained air observer, former reserve lieutenant with county sheriff dept., co-founder of MAST



G. Pat Macha, author of 3 books on airplane archaeology, researched this case for 10+ years, hosted History Channel's "Broken Wings," extensive publications & speaking engagements



Jeff Morgan, over 4000 dives, Commander, San Bernadino County Sheriff's Dive Rescue Team, SCUBA instructor, dive medic, Trimix, Nitrox, hyperbaric chamber operator



Mike Pizzio, FBI Special Agent, member of FBI's Miami Underwater Search & Evidence Response Team, certified deep water diver, member of The Explorers Club

#### More great team members





Kendall Raine, Mging. Dir. investment bank, key diver on *UB* 88 sub, steamer *Brother Jonathan*, & Convair B-36 D; assisted LA County Sheriff in drowning recoveries



Gene & Sandy Ralston, recovered 65+ drowning victims using sonar and their ROV and search boat; worked on Laci Petersen, Natalee Holloway & other hi profile cases



Peter Sotis, owner of Add Helium technical dive training School, and of the Decostop, on-line tech forum with 20,000 members; Instructor in Trimix, Wreck, CCR and Cave Diving



Lew Toulmin, MAST member, Explorers Club member, worked on successful N2700Q search, author of *Manual on Finding Lost Aircraft*, emergency management specialist



John Walker, 5000 dives, Wreck and Cavern Instructor, working Diver with Pacific Marine Services, volunteer with LA County Sheriff's Office Dive Team, expert in gear fabrication, worked on *UB-88* 

## THANKS!!!





**Comments or questions?**