

MISSING AIRCRAFT SEARCH TEAM:

CASES AND ACTIVITIES

2008 – Present; in chronological order by year of investigation



#	Yr of MAST Investigation; Yr of Incident; Plane #/Type; Pilot/Pax name; Location	Activity Status or Case Resolution	MAST or MAST Member Contribution; (contributions to successes in red)
1	2008; 2007; N240R, Bellanca Super Decathlon; pilot Steve Fossett (SF); NV & CA	SF plane wreck and 3 small bones found 1 yr after crash near Mammoth Lakes CA; DNA proof of identity succeeded via bone fragments found; case resolved; this case led to the founding of MAST	Future MAST members searched for 19 days in NV in private search effort; contributed 1000s of hours; interviewed over 40 persons; developed search strategy; tested NASA flight simulation software; found location of SF's bones; helped solve and clear the case; METRON staffer (and MAST member) gave scientific paper on the search at the Military Operations Research Society; popular articles published and briefings given by another member.
2	2008-10; NA; NA; NA; NA	NA	MAST served on and participated in NASA Search and Rescue inter-agency advisory committee
3	2009; 2006; N2700Q, Cessna 182; Pilot William Westover and pax Marcy Randolph; north of Sedona, AZ	Plane found by hikers who had seen small fire on day of wreck; bodies IDed; private search at request of family	MAST at request of family conducted 1000s of hours of research & interviews; reviewed radar tracks; did recon of area; developed mathematical search plan; prepped ground effort; found crucial clue in written report of small fire spotted on day of crash by 2 hikers; contacted hikers; they went back to site on their own and found plane; MAST notified local Sheriff's Office of find
4	2009-present; 1944; P-51-D Mustang; WASP Gertrude Tompkins Silver; Santa Monica Bay, CA, off LAX (WASP = Women Airforce Service Pilots, who made major war contribution; Tompkins is the only	Case still open; intermittent searches undertaken; awaiting more funding or better technology; plane likely in 200 fsw. Case and MAST efforts written up in <i>Smithsonian Air and Space Magazine</i> in 2010.	MAST conducted 1 very large and some smaller private searches in cooperation with surviving family, UB88 and Aircraftwrecks.com; over 40 volunteers, 10 mixed gas divers and 7 vessels; 50 of 50 possible sites dived in one week in the large

	missing WASP) (see below in 2018)		search ; other planes found (see below in 2018)
5	2009; 1955; 51-9227, USAF T-33A jet trainer; pilot Lt. Richard Theiler & co-pilot Lt. Paul Smith, USAF; Santa Monica Bay, CA, off LAX	Case resolved; plane raised from 200 fsw; bodies IDed; families notified and closure ceremony with families held at Western Museum of Flight, Torrance, CA, 4 Oct 2009	UB88, Aircraftwrecks.com, MAST and other team members searching for Tompkins found the T-33A; MAST contributed to overall search strategy, to obtaining multi-beam sonar data file; and to dive operations for the large search
6	2009; 1973; N3620Y; Pilot Larry McMahon + pax; red and white Cessna 210C; Santa Monica Bay, CA, off LAX	Plane caught in jet turbulence, crashed and sank in 117 fsw; case resolved; plane IDed; pilot contacted (he and pax survived and were picked up by SAR)	UB88, Aircraftwrecks.com, & MAST large search for Tompkins found this underwater plane wreck; wreckage and case researched; plane identified; pilot contacted and wreckage confirmed
7	2009-present; 1967; N4389J, Piper Cherokee 140; William Webb + 2 pax; Sierra Nevada Mountains, CA	Flight to Ogden UT over Sierras on 2 June 1967, via Ely NV or Cottonwood pass; case still open and active. Wreck possibly spotted during 2007 search for Steve Fossett. Search by air in 2009 by National Park Ranger unsuccessful.	MAST member researched case, planned search effort; MAST developed and disseminated flyer for hikers and hunters
8	2009, 1999; 1 pilot no pax on board; N6877, Piper PA-28R-200; Wrangell-St. Elias National Park and Preserve, 90 miles N of Chitina, AK	Case still open; plane likely crashed in very difficult terrain about 90 miles from nearest road	MAST investigated case history at request of family member; interviewed persons familiar with terrain and area; concluded search not feasible; advised family of that
9	2009; 2007; C-FMXV, Cessna 172B; Ron Boychuk; en route to Vancouver island, Canada	Case still open; plane probably crashed in thick forest	MAST member participated in InternetSAR crowd-sourcing review of photo recon and Google Earth data, to search for plane and learn more about this new technology
10	2009-10; 2009; YV2480, Cessna 182N; Pilot Robert Norton + 6 medical pax; SE Venezuela	American missionary plane with patients on-board crashed in jungle; wreckage never found; case still open; intermittent searches still occur	MAST provided extensive training to team of Americans and locals looking for the plane at request of friends and relatives; developed search strategy; traveled to Venezuela to assist
11	2009; 2008; N87V, Beechcraft 65 A90-1 King Air; three crew/pax; west Guyana	Survey plane crashed in jungle; cause unknown, case still open	MAST researched case; interviewed InternetSAR staff involved in remote searching for this a/c
12	2009-12; NA; NA; NA; NA	MAST "Manual on Finding Lost Aircraft" developed and published	MAST developed 44-page manual for use by LE, SAR, families and others searching for missing a/c
13	2010; 2010; N9313Z, Canada DHC-2 Beaver; 4 fatalities including NPS staff; Kaminshak Bay, AK	Partial wreckage found along shoreline	MAST assisted in large official team effort ; helped with search strategy (ITF)

14	2010; 1971; N400CP, Rockwell Jet Commander twin-engined corp. jet; Pilot George Nikitas + crew & pax; prob. in Lake Champlain, VT	Case still open; plane believed to be in 325 ffw; 13 private and public searches undertaken over the years	MAST investigated case at request of family; attempted to locate side scan sonar database of lake
15	2010-present; 1960; Bu. No. 144348, USMCR F9F Cougar single engine jet; Capt. John Eaheart, USMCR; Flathead Lake, MT	Case still open; awaiting better technology or more funding; search area about 10 sq. mi.; plane likely in about 150 ffw	MAST interviewed family members and eyewitnesses at request of family; conducted recon and prelim search of lake; brought eyewit to lake to ID floating debris field area; IDed search area
16	2010-11; 2009; Air France 447, Airbus A330; 228 pax and crew killed; south Atlantic off Brazil	Aerodynamic stall; plane and black boxes found in 10,000 fsw; case solved and causes of crash identified	MAST member played key role, as staffer of METRON, in devising mathematical and Bayesian statistical search strategy for the French aviation investigative agency BEA that found the plane during the third search effort (ITF)
17	2010-present; 2007; N222TB; Court Mumford; western OR on land, or off OR coast	Case still open; awaiting better technology or more funding; search area about 300 sq. mi.; under direction of and in cooperation with the Portland Police Bureau & other agencies	MAST interviewed numerous family members and possible eyewits; developed search strategy; conducted search of "triangle of trees" area w/ local SAR, and of land area of NW coastal zone; assisted in ground and helo search; eliminated 2 of 3 likely CAP radar tracks; developed probability map of possible offshore wreck locations; disseminated fliers to hunters, hikers; did PR in media (ITF)
18	2011; 1987; N8307H, Piper PA44-180T; pilot and trainee aboard; north Santa Monica Bay, CA	Case still open; family request for assistance; awaiting better technology and more funding	Case analyzed; previous sonar mapping reviewed; searching undertaken
19	2011; 2011; N650RV, self-built experimental plane; Pilot Joseph Radford; Grand Canyon National Park, AZ	Plane found in 2015 by off-trail hiker in north facing canyon (hence no sunlight) in GCNP north of the Colorado River; case clearly a suicide via intentional plane crash. In cooperation with National Park Service & Coconino (AZ) Sheriff's Office	MAST assisted with official search by interviewing numerous campers and potential eye- and ear-wits, family members, and others; reviewed radar info; reviewed 16 hours of CAP hi-res video of aerial search; advised on search strategy (ITF)
20	2011; 2011; Missing persons Albert and Rita Chretien of British Columbia driving a van; NV & other western US states (no a/c involved)	2 residents of BC drive to Las Vegas, NV in winter; new GPS took them off paved road into wilderness; got stuck; Albert went for help & died; Rita survived 48 days, found alive by hunter; Albert's body found in 2012	MAST assisted RCMP and NV and other law enforcement during official search with search strategy; questionnaire development; review of GPS possibilities and issues (ITF)

21	2012-4; 18 March 1958; Douglas F4D Skyray jet fighter-interceptor; Test pilot Leo "Pete" Colapietro, Santa Monica Bay, CA, off LAX	Plane found underwater, plane IDed, pilot contacted (survived ejection at 600+ knots, with injuries; was hospitalized for six weeks but recovered and was alive at 90 in 2018)	MAST and other team members found plane during searches for WASP Gertrude Tompkins; plane location info kept confidential to avoid looting.
22	2012; 2012; N174BH, Piper Navaho PA-31; Pilot Michael Bratlie; in or near Lake Superior north of Duluth, MN	Case still open; intermittent searches still occur	MAST assisted official search; interviewed dozens of campers and other possible eyewitnesses and earwitnesses in area; assisted in search strategy (ITF)
23	2012-5; 1944; Bu. No. 56076, WW II USMC F41-U Corsair; pilot Lt. John E. Date, Jr. (survived); north side of Ambae island, Republic of Vanuatu (ex-New Hebrides; SW Pacific)	Possible engine failure; wreck shown to MAST member, previously unknown pilot (who survived the crash) researched and finally IDed; parts of plane sent to family in AZ; case solved	MAST member shown plane wreck in village; interviewed villagers and chiefs; launched Explorers Club Flag expedition; developed 19 proofs of who the pilot was; located surviving family in AZ; located parts of plane being used to build a replica in Australia at Classic Jets Fighter Museum
24	2012; 1958; USAF B-47 Stratojet bomber; Col. Howard Richardson + 2 crew; off Tybee Island, GA (near Savannah). MK-15 bomb still missing, likely in 30 feet of mud and seawater	Case still open; B-47 landed after collision with USAF jet fighter, but jettisoned MK-15 hydrogen bomb into the bay with no explosion; USG search for bomb failed; private search in 2004 failed	MAST member investigated case; conducted recon of bay and waters near Tybee
25	2012; 2012; N26837, Gulfstream American AA-5A; pilot Tony Nicholls; Hart Mountain Antelope Refuge, OR	Adverse weather, wreck found and body IDed, in cooperation with Oregon state and local authorities	MAST assisted in large official team effort; interviewed family & others; reviewed text message transcripts; assisted with official search strategy (ITF)
26	2013; 2013; N36ML Beech Bonanza B36TC; Pilot Dale Smith + 4 pax; Antimony Ridge, near Yellow Pine, ID	Possible engine icing; wreckage found; bodies IDed	MAST assisted in official search by advising on search strategy and participating in planning meetings (ITF)
27	2014-6; 1967; NA; missing person Jim Thompson (JT), the "Silk King of Thailand"; Cameron Highlands, Malaysia, and central Thailand (no a/c involved)	Case still open; many theories; ex-OSS Lt. Colonel, ex-CIA asset and millionaire businessman went for walk in jungle and disappeared; largest search in SE Asian history; no clues found during search	MAST member conducted interviews with 1967 searchers; did first-ever scientific and mathematical evaluation of the 1967 search; eliminated about half of causes listed by press; wrote 650+ page report; made presentations at International Spy Museum & DACOR in DC, Explorers Club chapters in DC & Philly; Foreign Correspondents Club of Thailand, Siam Society & International School of Bangkok, etc., researched other suspects; provided input to a filmmaker and a TV show who made (largely non-scientific) "documentaries" on the case.

28	2015; 1944; Bu. No. 6672, USN Martin Patrol Bomber PBM-3; 6 crew (all survived) Choptank River, Chesapeake Bay, MD	Plane found in 31 ffw and surveyed by USN historical staff; plane found but cause of accident still unclear	MAST investigated case and found it had been resolved by Naval Historical Center survey team in 2000
29	2015-8; 2014; MH 370, 9M- MRO, Boeing 777-200ER; 12 crew & 227 pax; SE Indian Ocean off Perth, Australia	Plane KL to China diverted to SE Indian Ocean and all souls killed; case still open; about \$200 M USD spent on official search; Ocean Infinity contingency search concluded with no success in 2018.	MAST member (as staff of METRON) participated in undertaking estimate of plane location, based on backtracking of the flaperon found in the western Indian Ocean; published paper on same.
30	2015; 1989; N6773C, Beechcraft; pilot only; Oregon	PIC w/ no pax flying 6 October 1989 from Sun River, OR to Reno, NV went missing. Possibly crashed in Klamath Lake, OR. Possible DNA match to pilot found.	MAST undertook a preliminary investigation of the disappearance, wrote preliminary report
31	2015-present; Various; Various; Various; Various locations across USA	MAST database (d/b) created of missing a/c. BBC News did story on this; see: http://www.bbc.com/news/world-us-canada-42272952 ; see below	MAST (especially 1 member) developed a d/b of the 1550 missing civilian a/c in the US, that is the most accurate and comprehensive available.
32	2016; 2016; Missing person Gan Cheng Lim, 70, a.k.a. "Forest" Gan; disappeared in Cameron Highlands in N. central Malaysia (no a/c involved)	A mountaineer-botanist-scientist, who was pursuing the world's largest flower, hiked solo into the Highlands and disappeared on 5 Jan 2016. Case never solved.	MAST member, expert in Cameron Highlands, assisted and advised family remotely in trying to locate this person. Family contacted MAST member due to previous Jim Thompson search.
33	2016-17; 1961-62; Tha Morat Cave in N. central Thailand (no a/c involved)	Jim Thompson (the missing "Silk King of Thailand") and friends located this cave, the apparent source of 3-5 or more beautiful, 1000-year-old Buddha heads, near the top of a small mountain in Petchabun Province, Thailand. Cave never geo-located. Possible second Buddha cave never found.	MAST member expert on Thompson searched for and found the first cave (Tha Morat) and developed information on the second possible cave. Geo-located the first cave for the first time, for insertion into the Thailand caving d/b and publications. Wrote popular articles on the search, and published a scientific paper in a professional caving history journal.
34	2017; 1937; NR16020, Lockheed Electra 10-E Special; pilot Amelia Earhart & navigator Fred Noonan; S. Pacific from Lae, PNG en route to Howland Island	AE/FN disappeared on attempted round-the-world flight; case still open; 3 major theories (crashed and sank; captured by Japanese; survived on Nikumaroro island)	MAST member participated in the TIGHAR - National Geographic Society expedition to Nikumaroro island, Kiribati, to test hypothesis that AE/FN crashed there and briefly survived; did archaeological work; reviewed team efforts; did secondary research; making presentations; wrote detailed report on

			sextant box angle in case, and made presentation of same at Earhart Conference in Eugene, OR in 2017, and at Cosmos Club and Explorers Club Washington Group in Washington, DC.
35	2017; NA; NA; NA; NA	BBC story on MAST (by Owen Amos, see: http://www.bbc.com/news/world-us-canada-42272952 ; 17 Dec 2017)	MAST cooperated with the BBC in publishing a story on the BBC main website on missing a/c and MAST activities and cases, with a particular focus on the previously unreported MAST database on aircraft disappearances. This story had almost 500,000 readers. In response, inquiries about particular past and current cases were received and answered.
36	2017-18; 2017; C-FESN, 1964 Mooney M20D Master; pilot Dominic Neron & pax Ashley Bourgeault; NE of Revelstoke, British Columbia	Plane enroute from Penticton BC to Edmonton AB in Nov 2017.; plane disappeared; RCAF & Parks Canada suspended search after 9 days. Plane spotted in fall 2018 by Air Ambulance.	MAST attempted to secure info on cell phone tower pings, to reduce the search area; did research on cell pings; advised family; analyzed search pattern; in response to family/friends request.
37	2018; 1944; P-51-D Mustang; WASP Gertrude Tompkins Silver; Santa Monica Bay, CA, off LAX (WASP = Women Airforce Service Pilots, who made major war contribution; Tompkins is the only missing WASP) (see #4 above)	Case still open; plane took off from Mines Field (now LAX), headed W into wind w/ plan to then turn E and go to Palm Springs. Two theories: plane is in Santa Monica Bay, or in the San Gabriel Mountains. MAST is testing the Bay theory.	In late summer 2018 MAST assisted the TV show "Expedition Unknown" (Discovery & Travel Channels), UB-88 and others in a new substantial search.
38	2018; 1980; N23MN Beech T34B; LCDR John Victor Rowney, 34, and CPO3 John Benjamin, 27; Monterey, CA to King City, CA	The theory is that the rented plane went down, 28 May 1980, in west part of Carmel Valley, CA in very dense wilderness. 12 day search by CAP and USCG search turned up nothing.	MAST member interviewed forest rangers, local LE, relatives, members of local flying club, and others. Case still active; possible wreckage spotted.
39	2018; 1944; UC-64 Norseman; PIC and two pax (including Alton Glenn Miller, famous band leader); English Channel	Plane flew on 15 Dec 1944 without proper authorization in IFR conditions from RAF Twinwood Farm, attempting to reach Paris, likely via Dieppe. Apparent crash into English Channel, possibly due to icing, friendly bomb disposal, bad weather, or other causes. Plane never found; case still open.	MAST member participated in a TIGHAR team effort to re-analyze the case and substantiate a claim by a trawler fisherman that he pulled up the plane in the SW English Channel (far to the W of the normal flight path) many years ago. Extensive research at National Archives II undertaken. Case still active.

40	2018; 1957; USAF T-33 jet trainer; Lt. David Steeves, no pax; in mountains or high valley in Kings Canyon National Park (east of Fresno, CA)	9 May 1957 flight from Hamilton AFB (near SFO) to AZ, Steeves disappeared over the Sierras, was declared missing then dead, search unsuccessful. Steeves emerged 54 days later, after crawling 20 miles and killing a deer. Story later doubted but plane canopy found in 1978 by Boy Scouts, proving his story. Rest of plane still missing.	MAST member researched case, undertook search effort in Sierras via hiking in over a high pass with pack mules. Search unsuccessful but search box narrowed.
41	2018; NA; NA; NA; NA	MAST missing aircraft database expanded substantially re military a/c (continuation of item 31 above)	Three MAST members worked to obtain 8 reels of film in digital form from the USAF historical agency at Maxwell AFB in AL. These contained hundreds of additional missing military a/c cases and details on many others already in the MAST d/b; thus greatly improving the quality and quantity of the MAST information. The MAST d/b still remains the most comprehensive and detailed source of missing a/c data for the United States.
42	2019; NA; NA; NA; NA	MAST and others undertaking presentations at Royal Geographical Society Annual Conference in London, August 2019	Presentations include: Amelia Earhart case; Glenn Miller case; search optimization using Bayesian statistical analysis; AF 447; MH 370; using historic human remains detection dogs for searching; etc.

Notes on acronyms:

a/c = aircraft

AE/FN = Amelia Earhart and Fred Noonan

AF 447 = Air France 447, commercial airliner disappeared in South Atlantic

AFB = US Air Force base

BBC = British Broadcasting Corporation

Bu. No. = Bureau Number (a serial number designator for military aircraft)

CAP = Civil Air Patrol – volunteer, auxiliary, uniformed branch of US Air Force, which conducts aerial searches over land in USA

d/b = database

ffw = feet of fresh water

fsw = feet of seawater

GCNP = Grand Canyon National Park

helo = helicopter
IFR: = instrument flight rules, as opposed to visual flight rules
ITF = “inside the fence” – a search with full access to law enforcement (LE) and/or SAR agency files, and under LE or official SAR direction
KL = Kuala Lumpur, Malaysia
LCDR = USN Lieutenant Commander
LE = law enforcement agency or personnel, at the local, state or federal levels
LAX = Los Angeles International Airport, ex-Mines Field
MAST = Missing Aircraft Search Team
MH 370 = Malaysia Airlines flight 370, disappeared in SE Indian Ocean, case not solved
MK-15 = a 1950s-era hydrogen bomb of 7600 pounds, yielding 1.69 to 3.8 megatons of TNT (about 100 x the size of the Hiroshima bomb)
NA = not applicable
NPS = US National Park Service
OSS = US Office of Strategic Services, wartime predecessor to the CIA (US Central Intelligence Agency)
pax = passenger(s)
PIC = pilot in command
PNG = Papua New Guinea
RCAF = Royal Canadian Air Force
RCMP = Royal Canadian Mounted Police
SAR = search and rescue
TIGHAR = The International Group for Historic Aircraft Recovery
Two letter abbreviations, e.g. MN or AB = standard abbreviations of US states or Canadian provinces, e.g. Minnesota or Alberta
USAF = US Air Force
USCG = US Coast Guard
USD = US dollars
USG = US Government
USMCR = US Marine Corps Reserve
USN = US Navy
w/ = with
WASP = Women Airforce Service Pilots (WW II female ferrying pilots, uniformed, trained and paid but not officially in the US armed forces)
WW II = World War II

v14; January 2019; by Lew Toulmin