

Local Notice to Mariners for Oceania District

02/11/2026

Ala Wai Boat Harbor

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Ala Wai Boat Harbor Channel Range Front Light	29100	Status Unreported	PA
Ala Wai Boat Harbor Channel Range Rear Light	29105	LT EXT	PA
Ala Wai Boat Harbor Channel Buoy 4	29115	OFF STA/SINKING	PA
Ala Wai Boat Harbor Channel Daybeacon 6	29125	DAYMK DMGD	PA
Ala Wai Boat Harbor Channel Daybeacon 8	29135	DAYMK DMGD	PA

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Ala Wai Boat Harbor/General/Marine Events/Fireworks	Marine Events	FIREWORKS Hawaii Explosives and Pyrotechnics, Inc. will be conducting a land fireworks display neighboring Duke Kahanamoku Beach on Fridays from 1915 - 2030 January 03, 2025 to December 26, 2025. Please require all vessels to observe the safety/fallout zone radius from the firing site. Vessels and spectators are advised to maintain a distance of at least 210 feet radius from the launch site. Contact (808) 968-0600 for further information.	Lat: 21° 16' 53" Lon: -157° 50' 44"

Barbers Point

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Barbers Point Light	29650	LT EXT	FD
Barbers Point Harbor Entrance Channel Light 5	29654.100000000002	DBD DEST	FD

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Barbers Point Anchorage Area Bravo Tank Terminal Lighted Buoy A	29600	LT EXT	PA
West Beach Marina Light 2	29656	LT EXT	PA

Haleiwa Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Haleiwa Harbor Range Rear Light	29705	VEGETATION	FD

Honokohau Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Honokohau Harbor Approach Lighted Buoy 1	28190	SINKING	FD

Honolulu Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Honolulu Harbor Channel Buoy 3	29200	Status Unreported	FD

Kahului Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kahului Harbor Entrance Range Front Light	28340	LT IMCH	FD

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kahului Boat Ramp Buoy 1	28381.100000000002	MISSING	PA
Kahului Boat Ramp Buoy 2	28381.2	MISSING	PA
Kahului Boat Ramp Buoy 3	28381.3	MISSING	PA
Kahului Boat Ramp Buoy 4	28381.4	MISSING	PA
Kahului Boat Ramp Buoy 5	28381.5	MISSING	PA
Kahului Boat Ramp Buoy 6	28381.600000000002	MISSING	PA

Kahului Boat Ramp Buoy 8	28381.8	MISSING	PA
Kahului Boat Ramp Buoy 9	28381.9	MISSING	PA

Kalihi Channel

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Keehi Lagoon Barge Turning Channel Range Front	29315	REDUCED INT	PA

Kaneohe Bay

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kaneohe Bay Channel Daybeacon 5	28700	DAYMK IMCH	FD
Kualoa Point Range Rear Light	28720	LT EXT	FD

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Kaneohe Bay/General/Naval Activity/Military Operations	Naval Activity	Military amphibious and search and rescue operations may be underway at any time, day or night, within Kaneohe Bay in the vicinity of 21-26-06.83N/157-46-11.00W and 21-26-45.00N/157-46-55.00W (approximately .5 NM south of Mokapu Peninsula). Support surface craft will be equipped with appropriate day/night signals and markings and can be reached on VHF-Ch 82. In the interest of safety, it is requested that all vessels that use Sonar contact Water Front Operations on VHF-Ch 82A or by phone at (808) 257-2941 to avoid injury to divers that may be in the area.	

Kauai Island

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kikiaola Boat Harbor Range Front Light	29900	DAYMK DMGD	PA
Kikiaola Boat Harbor Range Rear Light	29901	DAYMK DMGD	PA

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Kauai Island/General/Naval Activity/Military Operations	Naval Activity	The following area is established as a safety zone during launch operations at PMRF, Kauai, Hawaii: The waters bounded by the following coordinates: (22°01.2' N, 159°47.3' W), (22°01.2' N, 159°50.7' W), (22°06.3' N, 159°50.7' W), (22°06.3' N, 159°44.8' W). (Datum: OHD) The above safety zone will be activated during launch operations at PMRF, Kauai, Hawaii. The Coast Guard will provide notice that the safety zone will be closed to all vessels and persons, and broadcast local notice to mariners prior to scheduled launch dates.The area described of this section will be closed to all vessels and persons, except those vessels and persons authorized by the Commander, Fourteenth Coast Guard District, or the Captain of the Port (COTP) Honolulu, Hawaii, whenever Strategic Target System (STARS) vehicles are to be launched by the United States Government from the PMRF, Barking Sands, Kauai, Hawaii.The general regulations governing safety zones contained in 33 CFR 165.23 apply. Nomenclature changes to part 165 appear by USCG–2006–25556, 72 FR 36328, 36329preview citation details, July 2, 2007 and by USCG–2018–1049, 84 FR 7813, Mar. 5, 2019.	
Sector Honolulu, Territorial Sea - Kauai Island/General/Naval Activity/Naval Gunnery Exercises	Naval Activity	Intermittent missile firing operations are conducted by the Pacific Missile Range Facility (PMRF), Barking Sands, Kauai, in the Whiskey 188 (W-188) operating area. Operations are conducted periodically throughout each week in an area bound by the following coordinates: 22:00N/159:51W, 22:00N/160:00W, 22:04N/160:06W, 21:59.5N/160:21W, 22:05N/161:35W, 22:45N/161:25W, 22:56N/161:49W, 23:34N/161:18.6W, 23:57N/160:41W, 25:41N/161:36W, 26:00N/159:58W, 25:47N/158:15W, 23:54N/158:15W, 22:20N/159:09W, 22:21N/159:30W, 22:13N/159:42W, 22:00N/159:51W Intermittent high power radar operations are conducted by PMRF at the following position: 22:03N/159:47W Request all mariners remain at least one mile off the coastline between Kokole Point and Nohili Point. Vessels may be requested to alter course due to firing operations and are requested to contact "Pacific Missile Range Facility" on VHF-Ch 16 prior to entering the above boundaries. If unable to contact the PMRF prior to entering or while in the warning area, relay messages through U.S. Coast Guard Honolulu. Vessels inbound and outbound for Hawaiian ports will create the least interference to firing operations as well as enhance vessel's safety by passing South of the Islands of Kauai and Niihau during the specified times. Federal law provides for civil penalties of \$40,000 and/or criminal penalties of 6 years in prison for each violation of the PMRF safety zone during the schedule of designated activity (33CFR 165.1406). The following are hazardous operations to mariners for February 10, 2026 through February 18, 2026: 10 FEB 0700-1500 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 90 NM WEST THROUGH NORTH 11 FEB 0700-1500 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 90 NM WEST THROUGH NORTH 12 FEB 0800-1600 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 60 NM WEST THROUGH NORTH. 13 FEB 0800-1600 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 60 NM WEST THROUGH NORTH. 14 FEB 0800-1600 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 60 NM WEST THROUGH NORTH. 15 FEB NO HAZARDOUS OPERATIONS SCHEDULED. 16 FEB NO HAZARDOUS OPERATIONS SCHEDULED. 17 FEB 0600-2359 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 60 NM WEST THROUGH NORTH. 18 FEB 0000-2359 KAULAKAHI CHANNEL AND NOHILI POINT OUT TO 60 NM WEST THROUGH NORTH.	

Kaunakakai Small Boat Harbor

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kaunakakai Small Boat Harbor Buoy 1	28630	SINKING	PA

Kawaihae Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE

Kawaihae Light Draft Harbor

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kawaihae LT Draft Harbor Buoy 2	28271	MISSING	PA
Kawaihae LT Draft Harbor Buoy 3	28271.100000000002	MISSING	PA
Kawaihae LT Draft Harbor Buoy 6	28271.3	MISSING	PA

Kwajalein Harbor

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kwajalein Harbor Channel Junction Buoy G	30500	OFF STATION	FD

Kwajalein Lagoon

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Kwajalein-Bigej Junction Light N	30460	LT EXT	FD

Lahaina Boat Basin

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Lahaina Boat Basin Lighted Buoy 2	28477	Status Unreported	FD

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Lahaina Boat Basin Lighted Buoy 3	28480	MISSING	PA
Lahaina Boat Basin Lighted Buoy 6	28495	OFF STA	PA
Lahaina Boat Basin Lighted Buoy 7	28500	MISSING	PA
Lahaina Boat Basin Lighted Buoy 8	28505	OFF STA	PA

Lanai Island

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Manele Small Boat Harbor Buoy 1	28540	MISSING	PA
Manele Small Boat Harbor Buoy 2	28545	MISSING	PA
Manele Small Boat Harbor Buoy 3	28546	MISSING	PA
Manele Small Boat Harbor Buoy 4	28550	MISSING	PA
Manele Small Boat Harbor Buoy 6	28551	MISSING	PA
Manele Small Boat Harbor Buoy 8	28552	MISSING	PA
Manele Bay Rock Danger Buoy	28553	MISSING	PA

Maalaea Basin

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Maalaea Basin Channel Lighted Buoy 1	28427	MISSING	PA
Maalaea Basin Channel Lighted Buoy 2	28430	MISSING	PA
Maalaea East Basin Buoy 4	28440	MISSING	PA

Makai Channel

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Makai Channel Daybeacon 3	28895	DAYMK MISSING	PA
Makai Channel Daybeacon 4	28900	MISSING	PA

Maui Island

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Hawea Point Light	28510	DAYMK MISSING	FD

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Hana Bay Daybeacon	28395	DAYMK DMGD/STRUCT DMGD	PA
Mala Channel Light 5	28507.5	LT EXT	PA
Mala Channel Light 6	28507.600000000002	LT EXT	PA

Maunalua Bay

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
Maunalua Bay Daybeacon 16	29010	HAZ NAV/DAYMK DMGD	PA

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Maunalua Bay/General/Hazards To Navigation/Shoaling Reported	Hazards To Navigation	HI ISLANDS - OAHU - MAUNALUA BAY SHOALING There has been a report of increased shoaling in Maunalua Bay, between Maunalua Bay Daybeacon 1A (LLNR 28935) and Maunalua Bay Daybeacon 2 (LLNR 28940) when transiting to and from Hawaii Kai. At mean low tide, the Maunalua Bay Boat Ramp also becomes dangerously shallow. All mariners are requested to use caution while loading and unloading at Maunalua Bay Boat Ramp and when transiting the channel. POC: DLRN DOBOR at (808) 587-1966 / (808) 832-3520 or website listing: https://dlnr.hawaii.gov/dobor/contact/	Lat: 21° 16' 28" Lon: -157° 42' 53"

Mokapu Peninsula

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
WETS 4	28674.04	MISSING	PA
WETS 5	28674.05	MISSING	PA

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Mokapu Peninsula/General/Hazards To Navigation/Hazards	Hazards To Navigation	Wave Energy Converter (OE-35) experienced structural failure on the port sea duct. Four large pieces of structure (up to 22 MT) have detached from the buoy and fallen to the seafloor. Further sea duct failure may occur. Suspension of deployment is imminent and coordination of tow to lay berth is in process. Mariners are requested to maintain 1000 FT from buoy.	

Pearl Harbor

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
PacIOOS Wave Lighted Buoy Pearl Harbor	29368	MISSING	PA

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Territorial Sea - Pearl Harbor/General/Naval Activity/Naval Gunnery Exercises	Naval Activity	The Puuloa Danger Zone is located in ocean waters as described by the below coordinates and is closed at all times to surface craft, swimmers, and divers, with the exception of authorized personnel. Mark B.J. Edmonson at mark.bj.edmonson@usmc.mil . The Danger Zone is bound by the following coordinates from Keahi Point to: 21.2622N / -157.9832W 21.2727N / -157.9526W The following are hazardous operations to mariners for February 10th, 2026 through February 18th, 2026: Tue 10 Feb 0700-1700 Wed 11 Feb 0700-1700 Thu 12 Feb 0700-1700 Fri 13 Feb N/A Sat 14 Feb N/A Sun 15 Feb N/A Mon 16 Feb N/A Tue 17 Feb N/A Wed 18 Feb N/A	

Sampan Channel

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Kaneohe Bay - Sampan Channel/General/Naval Activity/Naval Gunnery Exercises	Naval Activity	The Pyramid Rock / Fort Hase / Kaneohe Bay Danger Zone is located in ocean waters as described by the below coordinates and is closed at all times to surface craft, swimmers, and divers, with the exception of authorized personnel. Mark B.J. Edmonson at mark.bj.edmonson@usmc.mil . The Danger Zone surrounding Mokapu Peninsula at various coordinates: KBay: 21.4398 / -157.7844 to 21.4354 / -157.7730 Hale Koa / Pyramid Rock: 21.4459 / -157.7824 to 21.4664 / -157.7689 to 21.46229 / -157.7569 Fort Hase: 21.4402 / -157.7332 to 21.4396 / -157.7332 The following are hazardous operations to mariners for February 10th, 2026 through February 18th, 2026: Fri 06 Feb PRTA Beach Landing Sat 07 Feb PRTA Beach Landing Sun 08 Feb PRTA Beach Landing Mon 09 Feb N/A Tue 10 Feb N/A Wed 11 Feb 1200-1800 DZ KBAY SAR TRAINING Thu 12 Feb 1200-1800 DZ KBAY SAR TRAINING 0600-2359 Hale Koa/KBAY Small Boat and Swim Ops Fri 13 Feb 0000-2200 Hale Koa/KBAY Small Boat and Swim Ops Sat 14 Feb N/A Sun 15 Feb N/A Mon 16 Feb N/A Tue 17 Feb N/A Wed 18 Feb 1530-2130 DZ KBAY SAR TRAINING	

Sector Forces Micronesia/Guam Exclusive Economic Zone (EEZ).

Federal Discrepancies

NAME	LLNR	STATUS	AID TYPE
Agana Small Boat Basin Approach Range Rear Light	30670	DBD DEST	FD
Piti Channel Entrance Light 1	30751	STRUCT DEST/HAZ NAV	FD
Piti Channel Entrance Light 2	30752	STRUCT DEST	FD
Apra Inner Harbor Range Rear Light	30805	LT EXT	FD
Managaha Island Light	30865	DBD DMGD	FD
Tanapag Harbor Range Rear Light	30880	LT EXT	FD
Tanapag Harbor Channel Lighted Buoy 4	30890	LT EXT	FD
Tanapag Harbor Channel Lighted Buoy 7	30905	ADRIFT	FD

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
PacIOOS Wave Lighted Buoy Ipan	30602	MISSING	PA
FAD Site "Cocos" - Guam	30603	LT EXT	PA
FAD Site "FACPI 2" - Guam	30612	MISSING	PA
FAD Site "Number 3"	30631	MISSING	PA
FAD Site "Number 4"	30634	MISSING	PA
FAD Site GF1	30637.100000000002	MISSING	PA
FAD Site "Number 5"	30640	LT EXT	PA
Agat Small Boat Harbor Light 3	30811.3	LT EXT	PA
Agat Small Boat Harbor Daybeacon 9	30811.9	DAYMK IMCH	PA
FAD Site EE - Rota	30851.100000000002	MISSING	PA
FAD Site DD - Rota	30851.2	MISSING	PA
FAD Site DE - Rota	30851.3	MISSING	PA

Sector Honolulu, Exclusive Economic Zone (EEZ).

Additional MSI Categories

TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Exclusive Economic Zone (EEZ) /General/Naval Activity/Naval Gunnery Exercises	Naval Activity	FACSFAC Pearl Harbor established Special Operating Areas Four (SOA-4) as a permanent "HOT AREA" named "KAPU" on April 15, 1995. FACSFAC effective hours are 0700W to 2300W (Monday - Saturday from 1700Z - 0900Z) Monday - Friday, and on weekend's 0800W - 1600W (Weekends from 1800Z - 0200Z) or by request. Activities include intermittent naval gunnery exercises and airborne ordnance drops. "KAPU" is also designated as the emergency jettison area for aircraft with hung stores, etc. Hot area "KAPU" is bounded by the following coordinates 20-46N/158-16W, 20-42 N/158-04W, 20-13N/158-36W and 20-04N/158-11W. Scheduling authority is FACSFAC Pearl Harbor call-sign "HULA DANCER". "HULA DANCER" can be reached on primary 266.4/127.0 MHZ, or secondary 336.8/132.4 MHZ or telephone (808) 472-7333/7337 and may authorize transits through these areas on a case by-case basis.	

Sector Honolulu, Territorial Sea

Private Discrepancies

NAME	LLNR	STATUS	AID TYPE
FAD Site G - Pepeekeo, Hawaii	28007.010000000002	MISSING	PA
FAD Site F - Kailua Kona, Hawaii	28007.25	OFF STA	PA
FAD Site XX - Puako, Hawaii	28007.29	MISSING	PA
FAD Site DD - Opana Point, Maui	28007.33	MISSING	PA
FAD SITE MTBC 1	28007.4	MISSING	PA
FAD SITE MTBC 2	28007.420000000002	MISSING	PA
FAD Site M - Hana Bay, Maui	28008.010000000002	MISSING	PA
FAD Site NL - Nuu Landing, Maui	28008.03	MISSING	PA
FAD Site GG - Nakaohu Point, Maui	28008.05	MISSING	PA
FAD Site SO - Kahoolawe	28008.11	MISSING	PA
FAD Site CC - Kaena Point, Lanai	28008.190000000002	MISSING	PA
FAD site LL Hauula - Oahu	28008.25	Status Unreported	PA
FAD Site P - Penguin Bank, Oahu	28008.33	MISSING	PA
FAD Site HH - Pearl Harbor, Oahu	28008.350000000002	MISSING	PA
FAD Site BO - Barbers Point, Oahu	28008.37	MISSING	PA
FAD Site R - Makaha, Oahu	28009.010000000002	MISSING	PA
FAD Site CO - Kaena Point, Oahu	28009.05	MISSING	PA
FAD Site J - Wailalee, Oahu	28009.09	MISSING	PA
FAD Site BB - Moloaa, Kauai	28009.13	MISSING	PA
FAD Site DK - Anahola, Kauai	28009.15	OFF STA	PA
FAD Site WK - Wailua, Kauai	28009.170000000002	MISSING	PA

Additional MSI Categories			
TITLE	SUBCATEGORY	DESCRIPTION	LOCATION
Sector Honolulu, Exclusive Economic Zone (EEZ) - Sector Honolulu, Territorial Sea/General/Naval Activity/Naval Gunnery Exercises	Naval Activity	All vessels/watercraft operating within the Mokapu Peninsula near the Ulupau Crater located on Marine Corps Base Hawaii shall vacate the danger zone at the best speed and by the most direct route. Danger zone will include areas from (Zone 1 NE) 21°30'59.66"N /157°44'05.97"W to 21°29'16.58"N /157°40'30.19"W to (Zone 2 SE) 21°25'01.79"N/157°40'33.70"W to 21°27'11.84"N/157°43'53.83"W, forming a triangular figure. The following are hazardous operations to mariners for February 10th, 2026 through February 18th, 2026: Zone 1: Tue 10 Feb 0600-2200 Wed 11 Feb 0600-2200 Thu 12 Feb 0600-2200 Fri 13 Feb N/A Sat 14 Feb 0600-1800 Sun 15 Feb N/A Mon 16 Feb N/A Tue 17 Feb 0600-1900 Wed 18 Feb 0600-1300 Zone 2: Tue 10 Feb 0600-2200 Wed 11 Feb 0600-2200 Thu 12 Feb 0600-2200 Fri 13 Feb N/A Sat 14 Feb 0600-1800 Sun 15 Feb N/A Mon 16 Feb N/A Tue 17 Feb 0600-1900 Wed 18 Feb 0600-1300	
Sector Honolulu, Exclusive Economic Zone (EEZ) - Sector Honolulu, Territorial Sea/General/Naval Activity/Naval Gunnery Exercises	Naval Activity	The Waimanalo Bay Danger Zone is located in ocean waters as described by the below coordinates and is closed at all times to surface craft, swimmers, and divers, with the exception of authorized personnel. Mark B.J. Edmonson at mark.bj.edmonson@usmc.mil. The Danger Zone is bounded by the following coordinates: 21.3680N / -157.6954W 21.3559N / -157.6921W The following are hazardous operations to mariners for February 10th, 2026 through February 18th, 2026: Tue 10 Feb 0000-2359 Wed 11 Feb 0000-2359 Thu 12 Feb 0000-2359 Fri 13 Feb 0000-1200 Sat 14 Feb N/A Sun 15 Feb N/A Mon 16 Feb N/A Tue 17 Feb N/A Wed 18 Feb N/A	

South Coast Of Oahu

Private Discrepancies			
NAME	LLNR	STATUS	AID TYPE
Kaiwi Channel Lighted Buoy CHG	28931.2	Status Unreported	PA

Tutuila Island

Federal Discrepancies			
NAME	LLNR	STATUS	AID TYPE
Breakers Point Light	30185	LT EXT	FD

Unknown

Private Discrepancies			
NAME	LLNR	STATUS	AID TYPE
Drydock Point West Entrance Daybeacon 1	30787	DAYMK MISSING	PA
Mamaon Channel Lighted Buoy 1	30815	OFF STA	PA
Mamaon Channel Lighted Buoy 2	30820	OFF STA	PA
Fad Site FF - Saipan	30852.16	MISSING	PA
FAD Site GG - Saipan	30852.170000000002	MISSING	PA
Fad Site HH - Saipan	30852.18	MISSING	PA
FAD Site II - Saipan	30852.190000000002	MISSING	PA
Fad Site LL - Saipan	30852.22	MISSING	PA
Smiling Cove Lighted Buoy 1	30913	MISSING	PA