

ACTING COMMANDER PGM DIVISION ONE
MOTOR TORPEDO BOAT BASE NINE
NAVY NUMBER 811

CONFIDENTIAL

PGM Div. 1/A16-3

Serial No. 77.

17 February 1945

From: Acting Commander PGM Division ONE.
To: The Commander In Chief, U. S. Fleet.
Via: (1) Commander Motor Torpedo Boats, Treasury.
(2) Commander Task Group 70.8
(3) Commander SEVENTH Fleet.
(4) Commander In Chief, Southwest Pacific Area.

Subject: Operations of PGM Division One.

Reference: (a) Alnav 215 – 1944

Enclosure: (A) Composite Report of PGM Operations to 5 Feb. 1945.

1. Enclosure (A) is a complete compilation of the operations of this division, consisting of PGMs 1-8 inclusive, from date of arrival of each ship at Treasury Islands, Solomon Islands, to 5 February 1945, the date at which operations were secured in this area. The ships were based at MTB Base #9, Treasury, and conducted patrols in the Bougainville-Choiseul (Solomon Islands) and New Ireland (Bismarck Archipelago) areas. In addition some special missions and escort operations were performed.

2. This report is intended to set forth a comprehensive survey of PGM operations during this period, together with some of the highlights thereof, as a matter of interest and information to higher authority, to new ships of this class, and to training activities charged with indoctrination and shakedown of this new type of vessel. It is suggested that such distribution thereof, in addition to that indicated herein, be made as may be deemed advisable.

3. Operations consisted generally of night anti-barge and blockade patrols, during the course of which numerous strafings and bombardments of enemy shore positions and installations were accomplished. Several daylight sweeps and bombardments were also made. All patrols were conducted close offshore enemy held coasts, at distances varying from 300 to 2,000 yards off the beach. Individual action reports have been forwarded by section leaders following patrols involving enemy action.

4. Patrols were generally conducted in sections consisting of two ships in close column formation, section leader in the lead. Distance off the beach was determined by section leader, and station kept by radar. Such distance was determined by visibility conditions, moonlight, presence of reefs, known gun positions, mine fields, tactical situation, etc. Experience disclosed that except where movements might be expected from one island to another it is the practice of the enemy to operate its

barges as close to shore as possible. This aids in avoiding detection visually by bringing the craft within the dark background of the land mass, and by radar because its reflection on the screen merges with that of the shore. It was therefore found generally desirable to operate sufficiently close to land to make the shore line and surf visible, so that nothing in between the section and the beach could get by. Depending on light conditions distances 1200 to 2000 yards from the beach were found satisfactory. Where inter-island movements were to be expected mid-channel patrols were often made. Sections stayed at sea for three days at a time, arriving on station and commencing patrols at dusk, and retiring offshore and out of sight of land at dawn.

5. Proper use of radar was found invaluable. These vessels are equipped with SO-8A radar, which has a PPI scope. The most effective practice was found to be to train two or three well qualified men to stand the radar watches during patrols, spelling each other at two hour intervals. These men stood no watches during the day. It was found that this arrangement caused no undue strain on or lessening of efficiency of these men. The RdM and QM were invariably included in this team. They were furnished with a large scale chart of the area to be patrolled, on a chart board rigged next to the scope. After several patrols these men became remarkably proficient in recognizing salient land features on the scope and in fixing the ship's position at all times within a matter of yards. When barges were driven into the beach their bearings from the ship were constantly passed from the bridge to radar if sighted visually, and their position on the scope and chart immediately noted. In every case they were promptly found by using bearing and range information passed back to the bridge by radar, and destroyed. Similar success was had with targets picked up by radar and merging into the beach, and in finding shore installations marked for strafing and bombardment. During general quarters this team acted by RdM manning the radar, and the QM the fathometer and checking the chart constantly, passing to the bridge information necessary to keep the ship off reefs and out of minefields when chasing targets close inshore.

6. Efficient internal communication was of course absolutely vital, and it was soon found that the ships were initially insufficiently equipped in this respect. After trying to use sound power phones and voice tubes, several ships rigged their own system of loudspeaker communication between bridge and radar, and this was found most satisfactory. It is suggested that proper system of this kind be installed on every ship of this type. In addition it was found absolutely necessary to install a number of additional sound power phones over the ships' initial allowance, for communications between bridge and 40mm gun aft and with the 3" gun forward.

7. For external communications the ships were initially equipped with TCS radio and MN ship to ship radio. MN proved highly efficient and reliable and, it is believed, secure. Ships could not contact each other at ranges over four or five miles, but at shorter ranges it was very effective. However, continuous stress was laid on the necessity for keeping transmissions to a minimum, both for security reasons and to keep the circuit open for tactical purposes. It is considered that thorough indoctrination in this respect should be accomplished by training activities.

TCS radio, intended for long range communication, proved very unsatisfactory. While of course radio silence was maintained except when absolutely necessary, it was found to be generally impossible to contact base or other stations at ranges over 50 or 60 miles, even by CW. This was particularly true when operating close inshore. This situation on one occasion, as hereinafter described, almost led to serious consequences and the possible loss of a ship. It is suggested that effort be made to furnish more

satisfactory radio gear for this purpose.

VHF radio was added to ships' equipment by local installation, and proved very satisfactory for both ship to plane and ship to ship communication. However, it was found highly desirable to couple this gear to an RBO loud speaker mounted on the bridge, so that the conning officer would not be tied down to the use of ear phones. VHF was found necessary in conducting patrols in cooperation with Black Cats (PBY's), and in making joint air surface sweeps and strikes. Another very vital part it played was in making possible immediate and positive identification to each other of friendly ships and aircraft. That other methods of identification were not always wholly adequate was demonstrated by the tragic fact of several attacks by friendly aircraft in this area upon PT boats conducting similar patrols, with casualties resulting. It is considered that this gear should be part of the original equipment of every vessel of this type.

8. Illumination played a most important part in conducting effective attacks upon enemy targets. The most valuable illumination was afforded by aircraft flares dropped as directed by section leaders by Black Cat (PBY's) cooperating on patrols. Unfortunately, such cooperation was not always available. In the absence thereof illumination by 3" starshells and 60mm mortar proved fairly effective, with the former used at longer and the latter at shorter ranges. However, in every case some adequate illumination was found necessary in making an attack, as gunfire could not otherwise be made fully effective. It is considered that the installation of powerful focused beam searchlights would be a valuable addition to the equipment of these vessels. Possibly a dual purpose light of this nature could replace the present 12 inch signal searchlight, which is too diffused for this use. Of course such lights would have to be used with good judgment on the part of section leaders, but it is considered they could do so with fair safety, especially in the case of enemy targets caught offshore out of range of shore batteries, and if accompanied with a heavy volume of gunfire.

9. The original ordnance equipment of these vessels consisted of the following: One 3"23 mounted forward; four twin .50 Caliber aircraft type, aircooled machine guns mounted in four manually trained turrets amidships, two on each side; one single 40MM aft on the fantail; and one 60MM mortar, generally fired from the forecastle. Four of the ships had their 3"23 removed and a 3"50 gun substituted. Three still have the 3"23. [this totals 7 ships so we can see here that of this date PGM 7 is no longer on the books – Jeffrey La Favre]

Field experience soon showed that there was insufficient A.A. protection forward, and that additional small caliber firepower could be added. Accordingly field installation of additional .50 Calibers were made on each ship, and 37MMs on some and 20MM on others. It is considered that overall experience has shown that the following additional armament added to the initial equipment described above, has proven most effective: One 20MM on a low MK-10 mount on forecastle, forward of the 3" gun; one twin .50 Caliber machine gun on each side of bridge forward of the forward .50 Cal. Turret; one 20MM gun on MK-10 mount on each side amidships, in between the .50 Caliber turrets. This gives a broadside fire volume on each side as follows, from forward to aft: 60MM mortar; 20MM; 3" gun; twin .50 Cal.; twin .50 Cal. in turret; 20MM; twin .50 Cal. in turret; and 40MM.

Attacks were pressed home to extremely short ranges, at times to 300 yards or less, if possible. At such ranges the 3"23 guns were found fully as adequate as the 3"50, and more effective so far as illumination was concerned. This resulted from the fact that the lower I.V. of the 3"23 permitted illumination at ranges as short as 800 to 1000 yards, whereas the star shell of the 3"50 would not open

properly at less than 2500 to 3000 yards, at which range so small a target as an enemy barge could not be effectively attacked, especially with the smaller caliber guns. However, at very short ranges the 60MM mortar was found best for illumination, although unfortunately an adequate supply of 60MM illuminating ammunition was not always available.

A heavy volume of broadside fire was found to be the best defense against enemy fire, as well as the best attack. In every case when enemy shore batteries opened fire they were almost immediately silenced upon the section returning a heavy volume of fire, particularly from 3" and 40MM guns. Enemy barges and even a well armored and armed Type "C" gunboat failed to return fire when subjected to the full broadside fire power of a section of these ships. In all the numerous strafings and bombardments of enemy shore installations, including known positions of guns up to 4.7", from ranges as close as 500 yards from the beach, no enemy return fire was received once the ships opened fire. This was the case even in the very heavily fortified Buka Passage (Bougainville) area, which was bombarded two nights running by PGMs 7 and 8.

10. Patrols were made at slow speed, 10 knots or less, in order to keep down wake and phosphorescence. When bogeys were in the vicinity ships lay to at once, experiment with the Black Cats showing that it was almost impossible to see the ships themselves at night even from close range and low altitude. However, any wake or phosphorescence could be seen by aircraft. Upon obtaining a contact, section closed as near as possible at slow speed, increasing speed at once when section was discovered by the target. The speed of the PGMs was found adequate for the purpose. Upon closing to desired range, ships commenced illuminating with 3" or 60MM mortar, turned broadside to the targets, and opened fire with all guns, slowing speed or even lying to in order to keep all guns bearing on the target as long as possible. Upon depleting the small caliber magazines on one side, ships then either countermarched or circled and came in for another firing run on the opposite side.

During patrols all men except engine room watch and radarmen were required to be topside and at their gun stations. "Condition 1 Easy" was the usual patrol condition of readiness, wherein all the armament was manned by skeleton crews, who also acted as lookouts. These crews consisted of one section (one-third of the crew) with the other two sections sleeping on deck at their battle stations, ready for instantaneous manning of all armament on the sounding of General Quarters. On numerous occasions "Condition two" was maintained, consisting of a two section watch, one-half of the crew on watch at battle stations, and the other half sleeping on deck in vicinity of their battle stations. This condition was set whenever it was considered there was likelihood or probability of enemy contact.

11. Enemy tactics were found to be invariably to head for the nearest beach, drive the barge up on it, and if possible unload it and scatter into the woods. Sometimes hasty attempt at camouflage was made, or an effort to get it into a hideout. One type of hideout was discovered to be a shallow canal or sluiceway dug across the sand beach, and through overhanging foliage. On one occasion an attempt was even made to drag a barge up and across the beach and under the foliage on large rollers.

Another tactic was to head for a part of the beach covered by shore batteries and fire a flare. On this signal the shore batteries and barges would open fire on the attackers.

Due care was required not to fall into a trap. The PGM doctrine developed to counter this, or heavy shore fire opening up before ships were fully at General Quarters, was to turn directly away from the beach, increase to full speed, lay smoke in puffs, with each ship zig-zagging off in an opposite

direction. When offshore ships reformed, came to General Quarters, headed in for the same area, and closed the area firing all guns. It was uniformly found that further shore battery fire ceased on adopting this procedure, even with ships coming close in to the beach, illuminating, and firing on beached barges.

12. It is considered that the outstanding, and certainly the most harrowing and hazardous operation accomplished during this period was the salvage of PGM-5 by PGM-8 on the night of 22 July 1944. On that night these vessels were patrolling off New Ireland, Bismarck Archipelago, when PGM-5, which was in the lead, obtained a possible radar contact in the direction of the beach at Ulapatur Plantation. The contact was later found to be a large rock on the reef extending offshore at that point. While heading for it at a speed of 10 knots, at 2049 PGM-5 ran hard aground on the reef at a point 600 yards off the beach, taking a sharp list to port. Subsequent examination of the hull in dock revealed that the ship had grounded to well aft of amidships. The point of grounding was directly off the road junction of Rasirik (See Army Air Forces Conf. Chart of New Ireland, No. 61). The situation at once called to mind a similar occurrence some weeks previous, when a PT boat which had grounded off Bougainville was destroyed by enemy shore fire with heavy loss of life. All efforts of PGM-5 to get off under her own power failed.

An immediate decision to attempt salvage by PGM-8 was reached in spite of the risk of having it set on the reef by the strong winds and current present, or wrecking its screws on possible coral heads, thereby leaving both ships and crews in a helpless position. All efforts by both ships to contact base or any other station by radio to report the situation and call for help were ineffectual.

For over two hours following the grounding PGM-8 maneuvered in the vicinity of the reef in its efforts to get a secure hold on the grounded vessel. Several times the bow actually grated on the bottom, and at others the ship narrowly averted being broached on the reef by the strong wind and current. Close on the port beam of PGM-5 to the northward the reef extended still farther offshore, and wind and current were both setting in that direction. Fortunately the screws stayed clear. After double mooring lines quickly parted on the first towing attempt it was found necessary to bring the bow of PGM-8 in contact with the stern of PGM-5 in order to pass the heavy anchor chain for towing, in the absence of any other suitable gear. On the first two attempts to pass the chain between the ships the heavy shots slipped overboard before they could be secured as PGM-8 was carried sideways and toward the reef close abeam to northward by wind and current. On the third attempt the port bow of PGM-8 was brought against the starboard side of the fantail of the grounded ship and mooring lines secured against which PGM-8 could spring and maneuver its engines so as to keep its stern and screws from being carried to port toward the reef. Although the forepart of PGM-8 was being pounded on the reef by the swells this was accomplished for a long enough period to enable the PGM-5 crew to secure the last 30 fathom shot of PGM-8's anchor chain to the stern cleat of PGM-5. This was successful, and upon both ships then backing full the grounded ship came off.

During the operations, as a precautionary measure all classified materials, including Radar, IFF and records, were removed from PGM-5 and transferred to PGM-8 by rubber boat, and all life rafts were put overboard. Also both vessels remained at General Quarters, sparing only as many men as necessary to handle lines. Toward the end of the operations flashes of white light, as from flashlights, began to be visible on the beach directly inshore of the vessels. Since this was a rare occurrence in this area it was felt that the ships had been discovered by the enemy, and that the latter realized their plight and was

probably preparing to take them under fire. The operation was accomplished without casualty, and with no damage or loss, except of several shots of anchor chain.

13. With respect to the numerous strafings and bombardments of shore positions and installations, unfortunately no observation could be made as to results accomplished. However, a measure of the possible damage done may be derived from the following report of A. M. Andresen, Lt. RANVR, Coast Watcher on Choiseul Island, following the bombardment of PoraPora, Choiseul, by PGMs 2 and 3 on 24th December 1944. The report, which was the only one of its kind received during this period, is quoted in full as follows:

“PGM STRIKE ON PORAPORA CHOISEUL ISLAND

On 22nd A.M. December 1944 I reported a large enemy encampment at PORAPORA, situated at old native village site close to sea. I requested a strike which was approved and carried out by 2 PGMs at daylight on 24th. Their heavy caliber guns poured a withering fire on the target for approximately 30 minutes with excellent results, for the next day the damage was inspected by my Native Scouts who reported the complete destruction of a large Nip Living Quarters House causing considerable casualties, with, no doubt, many killed. A large enemy garden was also completely burnt out and destroyed.

A few days later my Scouts observed many Nips freshly bandaged working in other gardens. As there had been no other strike in the meantime these casualties, without doubt, were the result of the PGMs splendid effort. Nice work PGMs, keep it up, we like it if Tojo doesn't.

/S/ A.M. ANDRESEN

15.1.45

A.M. ANDRESEN, LT., RANVR
COAST WATCHER, CHOISUEL IS., BRITISH SOLOMON IS.”.

14. The most intense enemy engagement took place during patrol of PGM-4 and PGM-8 off New Ireland on the night of 11 January 1945, when four enemy barges were flushed in St. George's Channel to South of Dunup Plantation. While chasing two of them into the beach PGM-8 was, at 1000 yards from the beach, brought under intense fire from numerous shore batteries and the barges, and exchanged fire with them for five minutes. Both ships thereafter made repeated close-in runs on the shore battery positions and the barges, both during the night and in daylight the following day, completing the total destruction of three barges. The fourth was believed to have escaped into a barge hideout, which was thoroughly strafed and bombarded, but with unobserved results.

15. The most important enemy shipping destroyed was one large, fast, heavily armed and armored Type “C” gunboat, destroyed by PGM-5 and PGM-8 on the night of 20-21 July 1944. These Type “C”s have proven formidable opponents for PT boats encountering them on these patrols, but are no match for the 3” guns and other heavier armament of the PGMs.

16. In conclusion it is considered that the PGMs have proven ideally suited to the type of operations to which they have been assigned during this period. While enemy shipping has been scarce, so much as has been encountered has been destroyed, and it is believed an effective blockade has been maintained. In addition PGMs have been able to stand up to shore batteries with greater effectiveness than other types of craft assigned to this duty, and with less hazard because of their use of diesel fuel rather than high octane gasoline. It is considered that their use in forward areas where a larger volume

of enemy barge and small shipping activity is likely to be encountered would be well warranted.

A handwritten signature in black ink on a light background. The signature is written in a cursive style and reads "P. W. Hessel". Below the signature, the name "P. W. HESSEL." is printed in a smaller, sans-serif font.

Figure 1 signature of P. W. Hessel

cc to:
U.S. NavTraCen, Miami

OPERATION OF PGM DIVISION ONE

From Date of Arrival at Treasury to 5 February 1945.

Ship (PGM)	Date arrived Treasury 1944	<u>PATROLS</u>						<u>TOTALS</u>							<u>AMMUNITION EXPENDED</u>								
		B'Ville - Choiseul			New Ireland			Barges Destroyed #	Strafings & Bombd'ts	Mines Destroyed	No. of patrols	Days of Escort Duty	Special Missions	Total days operations	3'50	3'23	60MM Mortar	40MM	37MM	20MM	.50 Cal		
		No. of patrols	Strafings & Bombd'ts	Barges # Dest'd	Under S. fire	No. of patrols	Strafings & Bombd'ts															Barges # Dest'd	Under S. fire
1	6/17	19	14	0	0	0	22	15	0	12/4	0	29	3	41	0	84	653	133	3391				15,500
2	6/15	2	2	0	0	0	24	15	0	-	0	17	2	26	8	46	450		2438				18,620
3	6/7	14	11	0	0	0	24	19	1	-	1	30	12	38	11	2	397	286	2532				15,195
4	7/12	6	3	0	0	0	27	15	3	1/11	3	18	1	33	13	1	533	203	2773		1231		13,530
5	4/7	31	24	2	0	0	57	43	5	6/30	7	67	8	88	3	0	1857	473	6586	3755			44,715
6	6/7	9	8	0	0	0	28	22	1	-	1	30	5	37	13	2	343		1995		837		18,800
7*	4/7	24	19	2	5/3	6	6	4	0	6/30	2	23	3	30	0	1	485	242	2171	64			14,450
8	4/12	48	41	2	5/4	49	37	10	6/30	12/4	12	78	9	97	0	1	2451	784	8428		19,400		66,055
%totals		154	122	4	2	237	170	10	3	14	292	43	391	48	63	496	1723	5396	30,314	3799	21,468		206,865

NOTES: 1. * Out of Commission due to Collision since 18 July 1944.

2. # BARGES DESTROYED: Ship Participated in destruction of No. barges noted, while in company with others.

Total No. of barges destroyed by Division was 14; Consisting of 12 Type "A", One Type "C", and One Type "D".
The Type "C" Gunboat, destroyed by PGM-5 and PGM-8.

3. % TOTALS: 1. "No. of Patrols" equal No. of ships times patrols completed.

2. "Strafings and bombardments" equal number of ships times strafings and bombardments accomplished.

3. "Barges Destroyed" equal No. for division as a whole (see Note 2).

4. "Total Days Operations" equal ships days of operations.

COMMANDER MOTOR TORPEDO BOATS
NAVY 811

MTBT/A16-3

19 February 1945

FIRST ENDORSEMENT to:

A/C PGM Div. 1 Conf. Ltr.

A16-3 Ser. 77 of 17 Feb.

1945.

From: Commander Motor Torpedo Boats, Navy 811
To: The Commander In Chief, U.S. Fleet
Via: (1) Commander Task Group 70.8
(2) Commander SEVENTH Fleet
(3) Commander In Chief, Southwest Pacific Area
Subject: Operations of PGM Division ONE.
1. Forwarded.



G.R. VAN NESS.

Figure 1 signature G. R. Van Ness

COMMANDER NAVAL FORCES
NORTHERN SOLOMONS

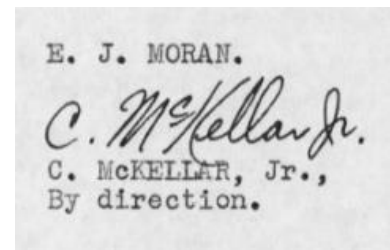
CNNS/A16-3
Serial 096

CONFIDENTIAL

SECOND ENDORSEMENT to
PGM Div. 1 Conf. ltr.
A16-3 Serial 77 dated
17 February 1945.

23 February 1945

From: Commander Naval Forces, Northern Solomons.
To: The Commander in Chief, U. S. Fleet.
Via: Commander SEVENTH Fleet.
Subject: Operations of PGM Division ONE
1. Forwarded.



E. J. MORAN.
C. McKellar, Jr.
C. McKELLAR, Jr.,
By direction.

Figure 2 signature of C. McKellar, Jr.,
by direction of E. J. Moran

cc: PGM Div. ONE.

UNITED STATES FLEET
COMMANDER SEVENTH FLEET

A16-3 (F-3-4/whr)
Serial 02542

CONFIDENTIAL

THIRD ENDORSEMENT to:

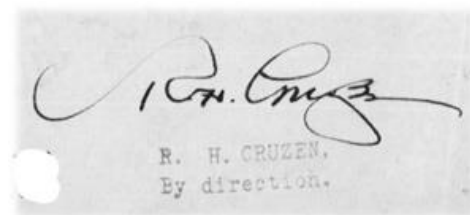
PGM Div. ONE Conf. Ltr.,
serial 77 dated 17
February 1945.

From: Commander Seventh Fleet
To: Commander in Chief, United States Fleet.
Subject: Operations of PGM Division ONE.
Reference: (a) CNO secret Ltr., OP 25-A4/Ser0051225A (SC)
S67-1 of 5 February 1945.

1. This interesting report covering the operations and capabilities of PGM Division ONE is forwarded for information.
2. TCS radio equipment does not meet the communication requirements of craft such as PT's and PGM's. By reference (a) the Chief of Naval Operations has taken cognizance of persistent reports of inadequate communications contained in PT Action Reports. The reply of Commander Seventh Fleet to reference (a) is now in preparation.
3. For operations against hostile beach areas and enemy barge traffic it is desirable that PGM be equipped with a radio transmitter having at least 50 watts of A3 emission, and also designed for A1 operation. For PGM's it is suggested that consideration be given to using equipment designed for use in aircraft because of its favorable size, weight and power supply requirements.

Copy to:

ComNavFor, NorSols.
ComMTB, Navy 811.
ActComPGM Div ONE (MTB Base NINE)
ComMTBRons7thFlt (with basic ltr)



R. H. CRUZEN.
By direction.

Figure 3 signature of R. H. Cruzen, by direction