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FIELD DISPATCH

INCOMING

ROUTING & RECORD SHEET

FROM: SD/RE - D & P

Dispatch No. 711-CAGWU

Dispatch Dated 23 Aug 51

Date Rec'd SEP 5 1951

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OPC Form 814 - 18 December 1950

SECRET

CONFIDENTIAL

711-CAGWU 23 August 1951

SUBJECT: KMHymnal

TO: Chief, ZACactus
Washington, D. C.

INFO: Chief, [ ]
Washington, D. C.

ATTN: [ ]

[ ]

REF: [ ]

1. Forwarded herewith are the following attachments:

a. Report by [ ] to [ ] concerning technical electronics considerations involved in KMHymnal.

b. A sheaf of working reports prepared by [ ] and [ ] touching upon various aspects of tests at sea.

c. Memorandum from [ ] to [ ] covering aspects of this operation directly involving the boat as such.

d. Memorandum to [ ] from [ ] covering present condition of the craft and listing estimated expenditures required to put it in seaworthy condition.

2. It is believed that these papers, supported orally, as they will be, by various headquarters people who have examined this problem here, offer sufficient evidence to document the conclusions outlined in Paragraph One of reference. These conclusions were substantially as follows:

a. Medium wave

a. Medium wave radio apparatus, as installed in this vessel and as it must be installed in any other vessel of similar size, cannot deliver a dependably useful signal in this region at distances greater than sixty-five miles from the receiver; this situation is attributable to the high noise level hereabouts, extreme channel interference and the inherent limitations of an antenna system capable of installation on a craft of this size.

b. The boat in question is inherently unsuitable for this type of work, and would be so even if the medium wave apparatus itself could be made to function effectively; this situation is due to deficiencies in hull design, interior arrangement, power plant and sail rigging; regardless of all other factors, a working ship rather than a pleasure craft is essential for mounting dependable operations of this nature.

c. No electronic considerations appear to prevent the successful operation of short wave equipment from a boat of this nature; on the present craft, however, they would be severely handicapped by the vessel's sea-going limitations, which would render impossible regularly scheduled broadcasting.

d. Short wave equipment mounted in a working type hull probably could be made to work on a reasonably dependable basis and would be useful under circumstances which prevented the use of land bases; however, such an operation would be much more troublesome and expensive than land-based activities.

3. In addition to the basic considerations of the vessel's own lack of adaptability for this work and the inadequacy of the medium wave equipment as installed thereon, a number of lesser difficulties have arisen concerning this operation. All of these difficulties could have been worked out had the equipment proved itself capable of operating as planned. They are commented upon here in the hope that similar problems can be prevented in the future.

a. Cover. The cover laid on for this activity, while appearing superficially adequate, could not stand up under anything approaching critical scrutiny. Not one of the crew members aboard the craft had any technical knowledge of its purported mission and no real provision was made for the conduct of cover operations. This caused no major problem, even though one or two contacts were made with inquisitive individuals bent upon legitimate marine biological experiments. I do not

believe,

believe, however, that any person (including customs officials, harbor masters, etc.) who came aboard the vessel went away feeling that it actually was doing what it was supposed to be doing. Such a set of conditions may not have demonstrated direct attributability, but they certainly aroused a great deal of curiosity. Had the vessel actually engaged in broadcasting operations for any period of time, I am sure it would have become just as thoroughly blown as a land-based activity inevitably becomes.

b. Command. The command situation aboard KMHymnal was, to say the least, ambiguous. There was the captain who was presumably in charge of the ship as such. There was [ ], who originally was scheduled to be propaganda chief aboard but who later developed into something approaching an owner's representative. There was [ ] communications supervisor, who did not appear to consider himself responsible to anybody. There was [ ], who was set up in business as shore representative and who scarcely had time to function as such. The command relationship between him and the other authorities concerned with this ship, both afloat and ashore, was never clearly established. Under the circumstances there is some question as to whether it could ever have been clearly established. This dispersal of command relationships, applied to a vessel with a crew totaling only eleven men, created a situation of considerable bickering, jealousy and confusion. This was aggravated by the fact that [ ], at least, claimed to have been briefed by the BGFiend case officer at headquarters to write him personal letters outside of channels whenever he felt the need to comment directly on operational matters.

c. Recruitment and Briefing. The members of the vessel's crew generally were perfectly good human beings who probably would have shaken down into an effective organization had the vessel remained in operational status for any extended period of time. They were not, however, particularly well chosen for the type of work that they were supposed to do or for the circumstances under which they would have had to have done it. The captain, although a thoroughly competent mariner, was not a strong enough personality to maintain effective discipline over his crew for extended operating periods. In addition, he suffered a serious physical disability which incapacitated him periodically for a day or more, and which rendered his complete physical breakdown at any time a distinct possibility. The HTCurio seamen were of the yachting rather than of the working breed, and although they behaved themselves quite

creditably,

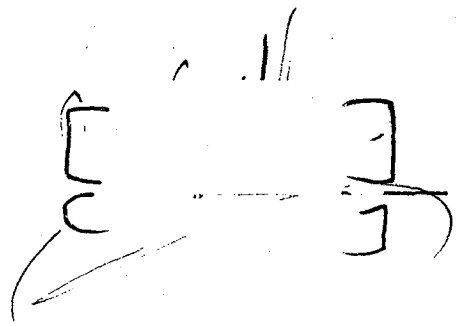
creditably, their work could have been done better by more hardy types. The communications technicians, while to all appearances fairly competent in their line, were young and lacking in stability. Generally speaking, the whole crew suffered an overdose of immaturity, for which the captain was unable to compensate. The members had received an inadequate indoctrination in basic cover operations techniques, particularly in matters effecting security; furthermore, they appeared to have been briefed to expect a set of circumstances other than those which actually confronted them upon their arrival, and a degree of autonomy which would have prevented effective control of their activities.

4. The recommendations contained in Paragraph Four of reference still represent the considered conclusions of [ ], [ ], [ ] and [ ], except that it is now proposed that the KMHymnal radio technicians be assigned to [ ] in general rather than to [ ] in particular.

5. The two HTCurio seamen on board this craft have achieved a great interest in the work of this organization and would like to remain with it. In view of their competent performance, despite the fact that they were not well cut out for the job in the first place, I believe the organization could profitably find a place for them. They are eager to undertake marine duties in some other area, whether hazardous or not, and I suggest they be given such an opportunity, although I should be happy to have them here as general handymen. [ ] is a personable, capable and adaptable young man, and I should particularly like to retain his services in a shore assignment here, probably as executive-administrative officer for [ ] [ ] believes he is entitled to a return trip to the States before reassignment here or anywhere else. Although I feel he could be developed into a useful shore-based officer, I shall not, at this time, particularly request his services. The captain, at the moment, is in a loyal and cheerful frame of mind and would like to retain some connection with the organization, even if only in an advisory capacity. Although his state of health is such as to render active operational work inadvisable for him, he might well perform a useful service as a part-time consultant on marine operations. The chief engineer is interested in diesels as such, rather than in marine diesels in particular; consequently, he would be useful wherever diesel motors are required. He seems to have gotten out of this craft's engines as much as could have been expected under the circumstances.

6. I wish

6. I wish to reiterate my belief that there need be no apologies by anyone for a decision now to liquidate this particular experiment. It has provided a number of people with valuable experience and has taught a number of lessons that could not have been learned had not the basic proposition been tried out in actual practice. It has, however, taken up a great deal of time that might better now be directed to more pressing and fruitful activities. Your approval of the recommendations contained in reference is, therefore, respectfully requested.



Attachment A (2 copies)
B (1 copy)
C (2 copies)
D (2 copies)

SECRET

21 August 1951

MEMORANDUM

FROM : [redacted]

FOR : [redacted]

SUBJECT: KMHymnal

1. There follows a discussion of KMHymnal as a vessel with no reference to the technical communications equipment installed, except where the behavior of the vessel has a direct effect upon the operation of the communications gear.

2. KMHymnal was designed, built and equipped as a pleasure vessel for use in the comparatively sheltered waters of the East coast of the U.S. While of deep draft (9ft.), she has a round bottom and is subject to a severe roll in moderate seas. This roll, in conjunction with the comparatively low freeboard, particularly forward, makes her a very "wet" vessel. Rolling is accentuated by the large mainmast and any use of sail for steadying purposes is discussed below. The crew's quarters are adequate to a point of luxury, but the commo equipment room is too small for the amount of gear installed. The galley would fill minimum standards were the vessel in use as a yacht in sheltered waters, but as presently equipped it is far too cluttered, and the lack of ventilation in Mediterranean waters results in a temperature too high for steady work during galley hours while cooking for a crew of eleven men.

3. Under power alone, the following criticisms may be made of the vessel:

a. Excessive vibration transmitted throughout the general vicinity of the engine room and particularly into the mainmast.

b. The engines are light duty engines designed for pleasure craft and unsuited for continual heavy operation. Reference to the memorandum from [redacted] to [redacted] will substantiate this statement.

SECRET

c. Like any

c. Like any motor sailer, KMHymnal will not sail except on a broad reach or run. The present configuration of the vessel limits the travel of the main boom because of the installation of a searchlight and direction finding loop on the port and starboard sides of the cabin housing. This obviously denies to the vessel any capabilities of tacking and severely limits the use of the mainsail for steadying purposes while the vessel is under power. Vibration from the engines transmitted to both mainmast and jigger has so distorted the sail tracks that it now requires a minimum of six men tailing on a halyard to raise and to lower the mainsail...three men are required to handle the jigger. In this connection it should be noted that the vessel was supplied with no deck winches to handle properly halyards or sheets. The small halyard winches supplied with the vessel are incapable of handling the sails unless the tracks are in perfect alignment. An exceedingly dangerous feature of handling the vessel while under sail is the "hot" antenna system which transmits its power on occasion to the standing rigging.

d. The vessel was delivered in the U. S. with its original wiring, which is of the house type, and is not suitable for marine use. This is evidenced by numerous minor fires which have occurred on board, and the extreme difficulty which the engineer has had in maintaining electric current throughout the vessel.

4. The short-comings of KMHymnal which are called out above have led to the writer's conclusion that KMHymnal is unsuitable for the type of work assigned to her, and that no further consideration should be given to the use of KMHymnal as a radio transmitting base. This does not mean that radio transmission cannot or should not be water-borne, but that this particular vessel is unsuited for its work. While no detailed study of vessels common to the Mediterranean area has been made, the writer has noticed at least three hull designs, varying from 100 to 150 ft. in length, which would appear to fulfill requirements of a broadcasting vessel. The hulls noticed have very wide beam and a very high sheer forward in order to be able to stand the heavy seas generated in the Adriatic by the prevailing strong North wind. A comparison can well be made between the sea conditions to which a propaganda vessel would be subject, and the conditions encountered by the Jayhawk vessel which attempted to release balloons in 1949. The Jayhawk vessel was reported to have been a very sturdy caique, but it encountered gails up to ninety miles per hour and attendant high seas and was never able to complete its mission.

Attachment D to 711-CAGWU, dated 23 Aug 1951
6 August 1951

MEMORANDUM:

SUBJECT: KMHymnal

TO: [redacted]

FROM: [redacted]

The KMHymnal is presently unable to operate on other than an outright emergency basis as a result of the following mechanical disorders:

A. STARBOARD MAIN ENGINE

1. The head gasket for the after two cylinders is blown and has blown several times in the past. The cause can most plausibly be attributed to a distortion of about .020" in the head and a similar but opposite distortion in the block.

The head can be trued using facilities available [redacted]. Time: 2 days. Estimated cost: $50.00. The block should be trued at the same time. A revised estimate as to cost will be provided when more is known about facilities. A new gasket is on hand.

2. The clutch is jammed in the ahead position. Cause cannot be determined without taking the gear box apart but is thought to be due to damaged plates. If it is plates, repair would involve - Time - 2 weeks (minimum) - Cost--Labor--$225.00 (Two mechanics at $8.00/day for 14 days). Parts - $200.00 (Two bushings at $100.00 each). Total - $425.00.

The labor estimate is based on the ship's Engineer and two [redacted] mechanics, the largest labor force which could work effectively in the space available.

B. PORT MAIN ENGINE

1. The clutch slips intermittently. Repair same as in (2) above. Plates are on hand. Since both engines cannot be worked on at once due to lack of space an additional two weeks would be required.

Engine Summary

Time	one month
Labor cost	$ 450.00
Parts i.e. those not on hand . . .	400.00
Machining head	50.00
Transportation, agent's fees, etc.	150.00
Total ex block	$1050.00
Add for work on block and unforeseen difficulties.	450.00
	$1500.00

While the foregoing engine repairs would make the ship operative in the sense that it could get underway, further work will be necessary before it can be taken to sea with a reasonable degree of safety.

C. WINDLESS*

On the basis of past experience - three previous overhauls have failed to provide satisfactory operation - this should be replaced. Guess as to cost - $1,500 to $2,000. In lieu of replacement it should be removed and completely overhauled; longer brake levers should be made.

Time ..... two weeks
Cost $500.00

D. WIRING*

1. (Other than Engine Room) Should be renewed through including many fixtures.

Time . . . . one month
Cost $2,000.00

2. Engine Room

Time ..... two weeks (with our own electrician working under direction of Captain)

Cost:

New distribution panel	$200.00
200' #12 wire	40.00
100' #10 wire	25.00
Junction boxes, switches, etc.	75.00
Labor (electrician and helper (@ $10/day for 14 days).....	140.00
	$480.00

E. HULL

1. There are leaks around hatches and other deck fittings which should be caulked and painted.

Cost..... $ 300.00

2. The topsides should be sanded and painted, primer and final coat. Deckhouse sides and decks should be sanded and painted, checked for dry rot and wooded as necessary.

Labor Cost.....	$ 600.00
Paint - 5 gals. gloss $10./gal.....	50.00
(to be suppoied by us- shipped from ZRMetal which is cheaper than buying locally)	
5 gals. semi-gloss $10./gal...	50.00
5 " flat $10./gal.....	50.00
Total	$ 1,050.00

F. GALLEY*

1. There is extensive dry, i.e. fresh water rot in the vicinity of the ice-box, freeze unit and sink. While it is not possible to determine the exact extent of damage it is undoubtedly significant and will increase at an increasing rate with the passage of time. There is at present evidence of deterioration near the main chain-plates and in the frames and knees next to the galley floor beams as well as in the beams themselves.

2. The layout of the galley is not as workable as could be designed, i.e. proximity of stove to freeze unit causes the latter to run almost continually. It is therefore suggested that the following steps be taken to correct existing conditions. All of the following work could be accomplished within the time necessary for the overhaul of the engines:

a. Tear out existing galley fittings and deck
b. Wood as necessary to eliminate rot.
c. Rebuild and relocate counters, storage space, etc. on the basis of experience to date.
d. Replace existing plumbing as necessary to eliminate faulty joints which are the cause of present damage.

Repairs and Revisions

Labor (3 Ships' carpenters at $8.00/day for 30 days	$ 720.00
Wood, fastenings, etc.	800.00
Sink	150.00
Plumbing	300.00
Painting, insulation & finishing.....	200.00
Total	$2,170.00

G. WATER TANKS*

1. The water tanks have leaks which result in the loss of a significant amount of fresh water. The location and size of the leak can only be determined by inspection. Since the tanks are located under the galley floor, extending aft to the bridge deck inspection is possible only when both the galley deck and the deck between the galley and the bridge are opened.

2. The tanks are made of galvanized steel welded and riveted. It is therefore impossible to say with certainty whether the existing leak can be properly repaired by soldering as would be the case with copper tanks. Any estimate as to the cost of repair is therefore subject to large error but as a guess -

To repair tanks.....$2,000.00

Note: During the past day the leak referred to above has increased seriously so that its repair now ranks equally in order of time importance with the engine repairs.

H. FUEL TANKS

There has been constant difficulty with fuel supply to the main engines due to the pressure of sediment and scale in the fuel tanks. These are located at the after end of the saloon and have hand holes. Cleaning would require:

Time ..... 3 days
Cost $200.00

I. STANDING RIGGING

1. None of the diamond stays on the main mast can be properly adjusted due to the fact that they have stretched to the point at which it is no longer possible to take them up with the turnbuckles. They cannot be shortened by re-splicing for the joints would then be weak. They should be replaced, preferably with stainless steel.

2. The main and mizzen shrouds are tight at present only by virtue of the fact twists have been put in to shorten them. This will eventually weaken the wire. While there are ways by which they might be shortened and re-spliced by far the most economical thing in the long run would be to replace them with stainless steel.

3. All of this work should be done even if the ship were not to set her sails,for even a very moderate motion sets up vibration in the main mast which will rack the hull.

4. None of this material can be obtained locally. If sent by air freight at $1.44 per pound the cost would be close to $900.00.

Wire - diamond stays, 200' of 7/16 19 wire	@ $175/100...	$350.00
Shrouds, dorestay, backstrap, 900' of 5/8" 19 wire	@ $250/100...	2250.00
Labor - 46 Splices at $25.00		1150.00
Thimbles - 46 at $2.00		92.00
Total ex transportation		3842.00

J. FATHOMETER

Can be put in working order by the ships force during period of overhaul. Allow $50.00 for possible need of parts.

K. AUTOMATIC PILOT

1. Under the present limitations of qualified watch-standing personnel this is an important item of the vessels equipment and should be repaired. Work can probably be accomplished by ships force. Allow $50.00 for parts.

2. No estimates have been made for alteration of boats or davits since no decision as to the best approach can be made pending determination of the vessel's future. This applies also to awnings, canvass work, etc. covered in the Captain's report.

3. The estimate of total period of 1½ months naturally presupposes that the materials which have to be ordered from ZRMetal can be ordered far enough ahead to be available at or near the beginning of the overhaul period.

4. Dollar estimates,while carefully made,are naturally subject to the errors inherent in those made without consultation with yards or supply houses and are designed primarily to provide a rough framework within which to base a decision pro or con. They should be regardedas minimum figures.

* Refers to Captain's report of 20 July 1951

RECAPITULATION OF COST ESTIMATES

ENGINES		$ 1,500.00
WINDLESS		500.00
WIRING -		
Non-Engine Room	2,000.00	
Engine Room	500.00	2,500.00
HULL -		
Deck	300.00	
Topsides - labor	600.00	
Topsides - paint	150.00	1,050.00
GALLEY		2,200.00
TANKS -		2,000.00
Water	2,000.00	
Fuel	200.00	
Fuel		
RIGGING		3,900.00
FATHOMETER		50.00
AUTO PILOT		50.00
		$ 13,950.00
Burden of transportation, shipping, etc. plus allowance for underestimates on tanks and galley		6,150.00
		$20,000.00

Note:
The cost of subsistence for personnel during repairs to galley and plumbing is not included in the foregoing figures.

Electric equipment -

The entire electrical system is in very poor condition and has been a constant source of trouble causing fires in various parts of the ship from time to time. The Engineer is kept busy in an effort to keep the gear operating.

Following is a list of outstanding items in need of electrical repair:

Fo'c's'l radio outlets
Coffee urn - out of commission
Ice box
Overhead lights
Crews bathroom
Cooking stove - due for overhaul
Automatic pilot
Fathometer
Navigation lights
Pilothouse & chart lights

Electrical fixtures in the wardroom are in order at the present time having been partly rewired after a serious fire some months ago. The after staterooms are in good condition. Some time ago a fire was caused in the Port cabin as a result of faulty wiring, the condition has since been remedied.. Switches throughout the ship are well worn and give trouble almost daily. Deck and searchlights are in fair order with the exception of the spreader lights which are only partly operative. Most of the deck receptacles have been closed off after numerous short circuits.

Anchor windlass -

The anchor windlass is in bad condition both electrically and mechanically. The Port gypsy is gone, both brake bands are worn and the Port anchor has been rendered useless. Hand rachets must be replaced, we believe repair is impossible.

The electric supply switch (marine type) is at present useless, one man being required to operate the supply with a screw driver. The present windlass is not "man enough" for the job it must perform. Throughout these islands strong winds prevail and often a sudden shift is necessary, (of anchorages). In its present condition three men are required to heave away, two men on the Fo'c!s'l head and one in the chain locker; we do not have three sailors to perform this operation.

Consideration should be given to the immediate purchase of a new and larger windlass before someone gets hurt manipulating the present rig.

Electrical heating unit -

The central heating plant worked to a high degree of efficiency last winter; it will not function however, in rough weather.

It is recommended by both the Engineer and myself that no additional electrical gear be added to the already taxed supply as the generator is at present operating at more than the recommended load level.

Fishing gear -

Most of the fishing equipment has been kept intact and is now waiting to be broken out when a fishing ground has been decided upon.

Fresh water tanks -

The fresh water tanks, self equalizing, have a leak at some unknown point. This condition arose about six weeks ago and the water loss seems to vary a bit from day to day. The seriousness of the leak cannot be ascertained. It is possible that the Port fill pipe is the source of trouble.

Galley -

The galley is in poor condition. Leaks around the sink and ice boxes are causing rot in the ribs, floor timbers and possibly the planking. This condition has existed for some years and is now making considerable progress. Attention is brought to the fact that this was pointed out to the owners before the ship sailed from Baltimore and they decided to postpone action on it until the condition showed itself to be more serious.

Plumbing -

Plumbing throughout the ship is in good condition and the hand operated water closets which replaced the electric models have proved to be a very wise investment. The sea cocks need cleaning and oiling but this is a minor affair.

Deck -

Cap rails and covering boards are badly checked from straining and exposure but the condition is not a serious one.

The decks and caulking are in fair to good condition, many of the deck plugs have been lost leaving fastenings exposed but the condition is kept fairly well in check.

Skylights are in good order exceptijg for minor leaks.

A good bit of dry rot is in evidence which will eventually have to have attention, a bad section extends along the starboard side of the trunk cabin well abaft the beam.

Masts -

All running rigging, i.e. haylards, sheets, etc. must be renewed having seen eight months of heavy service.

Standing rigging, i.e. shrouds, stays, etc. have stretched to a point where the slack can no longer be taken up with the turnbuckles. Rust is setting in rather heavily. Minimum requirement is resplicing. All this rigging was complete in Baltimore, the wire being supplied by Mr. George Breed. The rigging added since that time is in very good condition.

Sail tracks are either bent or out of line making it extremely difficult to make or lower sail, a factor to be considered is the danger element when sail handling is necessary in heavy weather. New sections of track appear to be necessary.

Spreader lights are shorted out and generally cause trouble, rewiring or overhaul is necessary.

Blocks, straps and tangs are in good condition.

Sails -

The working sails, fore, main and mizzen, are in fair condition and should stand another twelve months of limited service. The Genoa Jib, our only light sail was blown out in July off Rhodes and damaged beyond repair.

Awnings -

An essential item in tropical service is awnings, which serve not only to provide comfort but protect decks, caulking and paint from the devastating heat of the sun. The awnings now in use are inadequate and of poor cut and condition. This is an item for next season as the present awnings will see us through the remaining summer months.

Canvas work -

A complete set of canvas covers for winches, boats, skylights etc., will be needed within the next two or three months. The covers now in use are very weathered and in a weakened condition.

Lines -

A complete set of docking lines and odd coils of spare line will be required before the onset of winter weather.

Launches -

The launches are in good condition, except for checking and the need for paint. Engines are in good order and the Port engine is being repaired after some minor difficulty. Shafts, wheels and stuffing boxes are in good order.

Davits -

Davits aboard the ship are most inadequate and when lowering the boats there is constant danger of their snapping off. When anchoring off launches are needed not only for transportation but for the procurement of supplies. Six men are needed at the falls and the strain has worked the brackets, winches are fitted on the Port falls and block and tackles on the Starboard falls. Winches and falls are in good condition.

Fire equipment -

Fire equipment has been doubled since the arrival of the ship in WSPoplar and it is kept in constant check. The deck fire fighting equipment is in good order and is tested every few weeks. Equipment is considered most adequate.

Hull -

The hull, planking and fastenings are in very good condition. Seams are tight and no "weeping" has been observed. The ships bottom is un-scared and the shafts, wheels, rudder and stuffing boxes are in good order. All intakes, outlets and exhausts appear to be in good condition. Painting of topsides will be necessary in a few months.

Equipment -

The ship is fully found with household equipment, bedding, linens, china and silverware.

Paint -

The entire ship above the water line is in need of paint and it should be accomplished as soon as possible. The crew has maintained varnish and paint as much as possible, however paint of marine quality is not procureable in LCFlake.

_____
Captain

Chief Engineers remarks, mechanical and electrical equipment

Main engines are in fair condition, with the exception of the Port engine clutch; this clutch will need new friction plates in the very near future.

All the wiring is in poor condition, the distribution panel should be renewed and some receptacles are bad or completely missing, only the marine type receptacles installed in Baltimore are completely trouble free.

I suggest that the wiring and distribution panel along with certain receptacles be renewed at the earliest possible date to avoid further fires.

_____

Chief Engineer