

Aosr  
3700

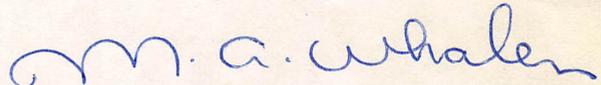
23 AUG 1968

SECOND ENDORSEMENT on CO, CGAS Brooklyn ltr 3700 dtd 7 Aug 1968

From: Commander, Coast Guard Eastern Area  
To: Commandant (OSR)

Subj: Helicopter Deployment Aboard CGC DALLAS (WHEC 716);  
report of

1. Forwarded. This was the first extended operational deployment of a helicopter aboard a 378-foot cutter. Their compatibility has thus been demonstrated and the results of this operation were most successful.
2. The recommendations concerning the operation, maintenance, and logistic support of helicopters deployed on 378-foot cutters should be further evaluated by the shipboard helicopter standardization project team.



M. A. WHALEN

OSR  
3700  
14 AUG 1968

FIRST ENDORSEMENT on CO, CGAS Brooklyn ltr 3700 dtd 7 August 1968

From: Commander, Third Coast Guard District  
To: Commandant (OSR)  
Via: Commander, Eastern Area

Subj: Helicopter deployment aboard CGC DALLAS (WHEC 716); report of

1. Forwarded. The Newport-to-Bermuda Race presented the opportunity to evaluate and develop the ship/helicopter system to good advantage. This excellent report reflects the interest and enthusiasm of the air/ship crew team. The information should be disseminated to other aviation facilities and ships equipped for helicopter operations. Recommendations within cognizance of the District Commander will be evaluated and implemented as appropriate.

2. All recommendations are concurred in. Standardization of procedures is needed and requested. Battery servicing capability and engine wash-down equipment should be provided all 378' ships.

3. Of some concern, CGC DALLAS has recently reported JP5 fuel contamination which will be investigated upon return to port. H52 1443 which was deployed on CGC DALLAS was found to have a clogged fuel strainer and change of the fuel control mechanism was required. Although not specifically associated with this operational evaluation, further information will be furnished when available.

*only if permanent deploy on  
units in known - not every ship*  
M. A. Whalen

M. A. WHALEN



DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

Address reply to:  
Commanding Officer  
USCG Air Station  
Floyd Bennett Field  
Brooklyn, New York 11234  
(212) 252-3838

3700  
7 August 1968

From: Commanding Officer, USCG Air Station, Brooklyn, N.Y.  
To: Commandant (OSR)  
Via: (a) Commander, Third Coast Guard District (osr)  
(b) Commander, Eastern Area

Subj: Helicopter deployment aboard CGC DALLAS (WHEC 716); report of

Ref: (a) COMDT(osr) ltr 1520.2i dtd 22 May 1968  
(b) CO, USCGAS, Bklyn ltr 3700 dtd 6 May 1968

1. From 20 June 1968 to 1 July 1968, HH52A CGNR 1443 was deployed aboard CGC DALLAS in support of the Newport to Bermuda yacht race. Continued use was made by the DALLAS of the helicopter to locate and identify participants during the race. It also provided a SAR capability, although this need did not arise.
2. Two pilots, both aircraft commanders, one AD1 and one AT3 made up the personnel complement. In future deployments of this nature and duration, due to early morning and late evening flights and the necessity to provide preflight maintenance, and servicing during darkness and under extended hours, a third qualified SAR aircrewman should be sent.
3. Two flights were launched daily, one in the early morning and another in the late afternoon, each lasting approximately 2.5 hours. Total Regatta Patrol time logged during the cruise was 25.8 hours involving eleven flights. Approximately 60 to 80 yachts were sighted each day by the helicopter within a 45 mile radius of the ship. These sightings plus those made by surface units and fixed wing aircraft provided very good accountability of the racing fleet. An official of the race committee was carried on all patrol flights. With his knowledge of sailing, the overall movement of the racing fleet could be predicted after observing the yachts within the surveillance area. The major concentration of yachts could be found and followed in this manner.
4. The helicopter operated within a 45 mile radius of DALLAS. Normal operating altitude was 500' and below. Nearly all operations were beyond visual range of the ship. The primary navigation aid was the ships radio beacon on 522 kcs. Reception was strong and accurate throughout the operating area during the entire cruise. Secondary navigational aids were the ship's air search radar (within 6 miles, surface search was used) and IFF. At the outer edges of the operating area, a minimum altitude of 1500' was necessary for good radar and UHF coverage. The ships UHF and HF DF capabilities provided additional navigational aids. No difficulties were experienced in voice communications. Operations normal reports were given every 15 minutes. It is recommended the ship give range and bearing information when the operations normal report is acknowledged.

Account  
4 Sec  
2 Pilot

CO, USCG Air Station, Bklyn, N. Y. ltr 3700 dtd 7 August 1968

*again*  
5. Flight quarters were called away 15 minutes prior to the published launch time. This did not provide enough time for certain personnel to perform their necessary jobs and enable the aircraft to launch on time. It is desired that the flight crew and certain other flight deck personnel be given at least 30 minutes to pre-flight, remove tie-downs, covers and perform any other pre-launch servicing that might be required.

*again*  
6. It was noticed during both launch and recovery that a number of spectators were observing flight operations from the O1 deck on each side of the balloon shelter. Due to the inherent danger of flight deck operations spectators should be kept to a minimum and well clear of the flight deck. This would also preclude interference by spectators of flight deck personnel in the performance of their duties. It is recommended that some sort of line-barricade be rigged across the O1 deck just forward of the balloon shelter during flight quarters, to limit access to the flight deck surroundings.

*no!!*  
7. Launch and recovery were conducted in accordance with NWIP-41-6 series and CG-384.1. No problems were encountered but both pilots concur with the recommendations made in reference (b) with regards to pattern altitude, pattern alignment, and take-off procedure.

8. Blade flap was noted to be quite excessive during shut down. This was due to the combined effect of wind and ship's roll, neither of which were ever excessive. (Winds 25 kts. max. and roll 6° max.)

9. During the first half of the cruise, the landing grid was used and some difficulties were encountered. The second half was conducted without the grid and the following observations were made:

a. Landing without the grid is much more comfortable. The aircraft is subject to much less stress on landing. Landings were made with seas 4-8' with the brakes off. The brakes were applied upon touchdown. *no - not as many down - they don't break in.*

b. Heavy aircraft carrier type chocks were inserted after landing at the same time the temporary tie-downs were installed. An extra man in the nets was utilized for each chock. *NO!*

c. Permanent tie-downs can be installed much easier and more effectively without the grid. Due to the grid's thickness, some of the permanent tie-downs had to be installed with the chains bent over grid members. On two occasions, it was necessary to lift the helicopter and reposition it after landing. This was done to place both main mounts in the grid and/or to position the aircraft for adequate tie-down access. In relatively calm seas, without the grid, the helicopter can be moved a short distance for tail rotor access (for servicing) and optimum tie-down positioning. This was accomplished with a brake rider, plane pushers, and temporary tie-downs attached.

*Better ISO Central will put eye in grid for tie down. tie-downs should and have been placed so that good leads will result if eye is placed in center of grid.*

*Ball!*

d. The grid was secured to the deck with 100 lb. test manila line which broke during normal operations. It is believed that due to the grid's construction and attachment that it would offer very little resistance to side-ward sliding. It is also believed that if the ship rolls enough, the tendency is for the helicopter to tip before it slides.

*Let  
Brown  
Remember!*

e. With the grid installed, walking and working on the flight deck close to the aircraft is difficult and at times, due to sea conditions and darkness, dangerous. Therefore, based on the foregoing observations and the actual operations conducted without the grid, it is strongly recommended that use of the grid on 378' High Endurance Cutters be discontinued.

*LET'S  
RE GRAMING*

10. The aircraft experienced no equipment failures so maintenance was kept to a minimum although some difficulties were encountered during routine servicing. The major problems were high seas, high winds, and flight deck restrictions. Servicing of the tail rotor had to be accomplished from a step ladder. This work placed the man at the very aft edge of the flight deck. Work on the main rotor head and tail rotor were impossible at times due to roll and high wind. Refueling also was a problem at times due to the amount of roll. When the fuel caps were removed, any fuel in the tanks (as little as 400 lbs) would spill. This can be eliminated through ships maneuvering. Another hazard realized was that when the flight deck became wet it became slippery. The existing non-skid paint was inadequate but is due for replacement by DALLAS.

*GRID!*

11. Spare parts and support equipment as per enclosure (1) were taken aboard. The amount was considered adequate. No storage problems were encountered. All electronic parts were stored in the ship's electronic shop while the rest of the equipment was stored in the helicopter shop.

12. Upon return to CGAS, Brooklyn, the aircraft was subjected to a thorough inspection to find any corrosion which would be caused by exposure to the heavy salt atmosphere. None was found. The lack of corrosion was due to the following steps; taken before and during deployment.

a. Prior to deploying the helicopter, it received a thorough wash and coat of wax. The cabin floor was sprayed with CRC226 and the transmission deck was sprayed with CRC226 and CRC336.

b. During deployment, the aircraft was washed once a day after securing from flight operations. The engine was washed and "rustlick" after securing also. Although they were not available for this deployment, it is recommended that all cutters capable of extended helicopter deployment be furnished with a Pressure Applicator (FSN 1730-R00-6049) and a Water Applicator (FSN 1730-R00-6050), to ensure maximum preventative maintenance of the engine. One other problem was encountered along these lines in that the ship's electrical power unit for the helicopter failed. This meant all starts had to be done with the helicopter's battery including motoring for engine wash with no way to re-charge it. It is recommended that these ships have the capability to service and recharge the helicopter's NI-CAD battery.

*?*

CO, USCG Air Station, Bklyn, N.Y. ltr 3700 dtd 7 August 1968

c. After the aircraft was washed, an anti-spray cover provided by CGAS, Salem was placed on the aircraft (enclosure 2). The cover was difficult to install in any kind of wind and it did tend to scuff the windshield, but it did a very effective job of keeping the salt spray off of the engine and transmission area. Some ripping of the cover was caused because of its tendency to balloon and some re-enforcing should be added, particularly in the area of the temperature probe.

13. It is recommended that a standard instrument approach for a WHEC be formulated for future operations of this nature in the event a helicopter was forced to return to the ship and land under marginal weather conditions.

14. This deployment proved the worth of extended helicopter/shipboard operations aboard a WHEC. The High Endurance Cutter and the HH52A helicopter are compatible and should be used as a team often not only because of the resulting SAR effectiveness, but also to maintain mutual proficiency of the aircraft pilots and shipboard aircraft control team.

*yes*

*No it didn't, it was just me that!*

*V. K. Randle, Jr.*

V. K. RANDLE, JR.

Encl: (1) Spare parts & support equipment list  
(2) Photos (6) of anti-corrosion cover  
(3) CO, CGAS, Brooklyn ltr 3700 of 6 May 1968

Copy to:  
CGAS, Salem  
CGC DALLAS (WHEC 781)  
CGC HAMILTON (WHEC 715)  
CGAS, Mobile

## Spare Parts & Support Equipment List

1. 1 case of 23699 (24 qts)
2. 1 case of 5606 (24 qts)
3. 5 gallons of "Rustlick"
4. 5 gallons of CRC
5. 35 lb can of grease
6. 6 bundles of rags
7. 1 hand grease gun
8. 4 boxes of Kemwipes
9. 2 bottles of plexiglass cleaner
10. 1 - 80 hour engine kit
11. 1 helo flyaway tool kit
12. 1 set of blade saddles
13. 1 blade crutch
14. 1 blade pin puller
15. 1 set of seals for transmission filters
16. 2 sets of blade boots
17. 1 spare battery
18. 1 can of hand cleaner
19. Maintenance manuals, IPB and HMI
20. 1 quart of 7870 oil
21. Anti-spray cover
22. Yellow Sheets
23. AT Fly-away tool box
24. Wiring diagram

### Spare Parts

1. 1 ARN-73 ADF
2. 1 ARC-51 UHF
3. 1 618-T HF
4. 1 CU-351/M Coupler
5. 1 ARN-79 Radalt
6. 1 set of spare fuses
7. Assorted light bulb kit
8. Break-away wire











EXTERNAL

EXTERNAL

1971 710

