DECLASSIFIED ~~CONFIDENTIAL~~ CONFIDENTIAL

DEPARTMENT OF THE NAVY
CARRIER AIRBORNE EARLY WARNING SQUADRON
ONE HUNDRED THIRTEEN
FPO SAN FRANCISCO 96601

5750 IN REPLY REFER TO:
Ser OPS/C-001

Report Symbol 5750/1
Registered Mail
~~CONFIDENTIAL~~ (Unclassified upon removal of enclosures (3), (4) and (5)

From: Commanding Officer, Carrier Airborne Early Warning Squadron ONE ONE THREE
To: Chief of Naval Operations (ATTN: OP-05D2)

Subj: COMMAND HISTORY FOR CALENDAR YEAR 1985 DECLASSIFIED

Ref: (a) OPNAVINST 5750.12C
(b) CNO (OP-0502) ltr 5750 Ser 0502/000482 dtd 22 Jul 1986

Encl: (1) Black Eagle Chronological Summary of Operations 1985
(2) Black Eagle Operational Statistics 1985
(3) Black Eagle Operations Narrative 1985
(4) Black Eagle Maintenance Narrative 1985
(5) Black Eagle Training Narrative 1985
(6) Black Eagle Safety Narrative 1985

1. In accordance with references (a) and (b), enclosures (1) through (6) are submitted.

D. A. ERSEK
Acting

Copy to:
Director of Naval History (OP-09B9)

CLASSIFIED BY COMTHIRDFLT/COMSEVENTHFLT OPORD 201
DECLASSIFY ON: ORIGINATING AGENCY
DETERMINATION REQUIRED

R074 210 458

DECLASSIFIED

DECLASSIFIED ~~CONFIDENTIAL~~ CONFIDENTIAL

~~CONFIDENTIAL~~

BLACKEAGLE CHRONOLOGICAL SUMMARY OF OPERATIONS 1985 (U)

JANUARY	
01-14	INPORT SAN DIEGO
14-26	READIEX 85-1/ORE
27-31	INPORT SAN DIEGO
FEBRUARY	
01-18	INPORT SAN DIEGO
19-28	TRANSITEX/BGAREM
MARCH	
12-28	TRANSITEX/BEAR ALERT
21	7TH FLEET INCHOP DATE
28-31	INPORT SUBIC
APRIL	
01	INPORT SUBIC
02-07	TRANSITEX
07-10	INPORT SINGAPORE
11-15	TRANSITEX I.O.
15-30	NAS OPS
MAY	
01-17	NAS OPS
11-16	BEACON FLASH 85-6
18-20	TRANSIT TO MOMBASA
21-25	PORT VIST MOMBASA
26-31	TRANSIT TO DIEGO GARCIA
JUNE	
01-04	COVERT TRANSIT TO NAS
05-30	NAS OPS
12-13	MULTIPLEX
JULY	
01-07	NAS OPS
05-06	PASSEX WITH MIDWAY
08-18	TRANSIT TO FREMANTLE
19-23	INPORT FREMANTLE
24-31	TRANSIT SUBIC
AUGUST	
01-02	INPORT CUBI PT., R.P.
03-14	TRANSIT PEARL HARBOR
09	OUTCHOP 7TH FLEET
09-10	PASSEX BG BRAVO
15-17	INPORT PEARL HARBOR
18-24	TRANSIT SAN DIEGO
23	FLY OFF NAS MIRAMAR
24-31	POST DEPLOYMENT STANDDOWN

SEPTEMBER	
01-25	POST DEPLOYMENT STANDDOWN
26-30	NAS MIRAMAR
OCTOBER	
01-03	CNO PROJ 108-1
04-07	CNO PROJ 25-1
07-10	COMPTUEX 86-1
10-17	NAS MIRAMAR
17	TOPGUN GRADEX
18-22	NAS MIRAMAR
22-24	LINK-4 T & E
25-31	NAS MIRAMAR
NOVEMBER	
01-08	NAS MIRAMAR
09-23	RED FLAG 86-1 NELLIS AFB, NV
24-30	NAS MIRAMAR
DECEMBER	
01-15	NAS MIRAMAR
16-20	RISING FIGHTER
21-31	NAS MIRAMAR

BLACK EAGLE OPERATIONAL STATISTICS 1985 (U)

TOTAL FLIGHT HOURS - 2,501.9

TOTAL CARRIER LANDINGS (DAY/NIGHT) - 401/232

TOTAL SORTIES - 697

NUMBER OF E-2C's ATTACHED -	01 JAN	- 30 JAN	4
	31 JAN	- 09 SEP	5
	10 SEP	- 30 OCT	3
	31 OCT	- 01 NOV	4
	02 NOV	- 31 DEC	3

Enclosure (2)

BLACK EAGLE OPERATIONS NARRATIVE 1985

(C) January provided many opportunities to expand the tactical role VAW-113 plays within the battle group. In addition to the Constellation and Airwing Fourteen ORE, Battle Group Delta completed the first battle group evaluation administered by COMTRAPAC. Upon completion of the battle group evaluation, the squadron faced the "normal" rigors of the ORE.

(C) Battle Group Evaluation. BGE was an intense 3 day evolution just prior to ORE. It's scenario orientation and application created a real world environment for maintenance as well as aircrew. The location of the evaluation exercise was blue water which may or may not be construed as realistic, but the quality of the raids were very good. The large size of the raids along with excellent radar and communications jamming/instrusion combined with constant Duzy Observer participation thoroughly tested the AAW posture in a open-ocean arena. Problems arose with frequent expansion and contraction of the grid.

(C) ORE. Adequately tested all aspects of Aircrew knowledge regarding CV NATOPS, TACPROS (both in theory and in practice) and Recce. VAW-113 personnel performed the required tasks in an excellent fashion proving themselves ready and willing for deployment.

(C) Battle Group Team Trainer. BG TT utilization has created many problems while generating very lttle actual training for our personnel. In order to increase the value of the exercise for participating E2 crews and create a more realistic scenario for all participants, increased communction circuits and alocation other than in the simulation control module, alng with access to Link-11 is required.

(C) The squadron deployed to WESTPAC onboard USS CONSTELLATION on 21 February. Operations earlier in the month were dominated by FCLP's and system checks. A CQ period on 19 February allowed us to night refresh four of eleven pilots and fly aboard all five aircraft. The remainder of the pilots completed refresher landings during CQ on 21 February. The transit to the Hawaiian operating area exercises the Battle Group "D" AAW posture. MASEX and Busy Observer (B-52) flights were also flown daily. These evolutions allowed us to fine tune our OAB proedures.

(C) The Black Eagles continued their Westward trek towards the Indian Ocean on 12 March when the ship left Pearl Harbor. The pace of operations was intense from the outset but all hands were equal to the task. After a brief refresher CQ period which was conducted in conjunction with mission OPS, VAW-113 entered the "Bear Box" and commenced almost around the clock flying. We provided the SSC link picture during early morning hours and airborne early warning throughout. First Bear activity was on 18 March and was provided by the Soviet Army. Initial detection was at 436 NM by the E-2 and

intercept was facilitated at 285 NM. Aircraft were escorted until they were outboard at 300 NM. On the 19th SNA Bears attempted to located the CV again to no avail. Initial detection was by the E-2 at 459 NM and escort was initiated at 299 NM. Connie's aggressive EMCON posture allowed us to thwart all attempts to locate the HVU until we were just outside the R.P. Adz. Soviet detection was accomplished by Cam Rahn Bay aircraft on a serveillance profile which took them over almost every surface unit within 300 NM. Once again the TU 95/s were detected at 450 NM and were under escort commencing at 299 NM.

(C) Pilots were also very much involved with the mission during these flights doing the lion's share of the EMCON working during both day and night EMCON OPS. Night currency was maintained with the cooperation of Air Ops who provided night trap cat trap evolutions whenever possible and touch and go trap during the remaining night recoveries.

(C) The month of April started as most line periods. Little did we know that it would be a record setting month for the Balck Eagles. By the time the 30th rolled around we had flown 414.4 hours with 106 sorties.

(C) During our transit from Subic to Singapore there was only one Cam Rahn Bay launch towards the Battle Group. After normal ops over Hinan Is. two Bear Delta's transited the air routes to a point north of the CV. They thenturned inbound closing to within 117 NM before breaking off and returning to Cam Rahn Bay. E-2 stations close to Vietnam allowed for covergae of Cam Pahn Bay and detection of several helicopter flights. Familiarity with the airways and normal military operating tracks allowed the E-2 crews to make rapid assessments of contacts approaching within 300 NM of the Battle Group.

(C) Out flights out of Singapore commenced before clearing the Straits of Malacca. E-2's were launched to provide CAP control to intercept Malaysian F-5's out of Btterwork Airfoield. At no time though did the F-5's fly more than 40 NM from their coastline.

(C) Indian IL-38 activity during our transit from the straits to the NAS was heavier than expected and concentrated to the West of GOA doing an ASW exercise. On several occasions their tracks brought them within our 200 NM buffer so they were escorted. After reaching our MODLOC position the Indian IL-38's concentrated their activities 200-250 miles West of Bombay. On 24 April a surfaced Indian Foxtrot submarine was found by CAP under Black Eagle Control.

(C) Soviet aircraft activity was very predictable for most of the month. The IL-38 turnover in Aden came about as expected. An E-2 launched to the North and one to the South 30 minutes later. Intercepts were made at 299 NM from the CV and escorted until 299 NM outbound. Soviet Cub activity out of Karachi and Aden followed the standard airways cutting across as they have since 1980. All intercepts of Cub aircraft took place between 200 and 300 NM from the CV.

(C) BG "D" Tipper information has been generally accurate thus far. It has allowed the E-2 to concentrate on long range AEW by quickly verifying commercial aircraft traffic that would normally have to be VIDed by DLI. Tipper information has no occasion been non-existent. Twice IL-38 Mays were detected when tipper information showed no threat aircraft airborne. The first run was made by an Indian IL-38. First indication of aircraft activity was the E-2 detection 275 NM North of the CV. The IL-38 was non-squawking and not on an established airway. The E-2 vectored a SSC F-14 to intercept. The second incident involved two Soviet IL-38's out of Aden. They made a silent transit from the South, skirting the BG's southwest picket ship, before turning inbound from the South. Initial detection was by the E-2 at 360 NM from the CV. Previous to the May detections two AN-12 Cubs 30 minutes apart were detected by the Black Eagles on an airway enroute from Aden to Karachi. Tipper information was available and the aircraft were squawking Mode III; a deviation from what we had seen before. It appeared to all concerned to be a coordinated evolution between the Cubs and the Mays designed to draw our attention away from the Mays.

(C) Fighter Link Reference Report (FLRP). Now that our F-14's have expanded memory capabilities and new software we have started to evaluate FLRP. Even though our F/A-18's will not have the capability to utilize this fetaure until after cruise we have found that we could work with Hornets at the same time as FLRP is employed. We have only been able to schedule a few dedicated flights with 4 or more fighters participating but initial response from all aircrews has been most favorable. FLRP allows Tomcat PIO's to see almost super-imposed targets via Dolly. We have found the following to be incorrect and recommend the following changes be made to the F-14 Link-4 manual:

- Fighters can keep their own DLA vice using a common DLA.

- Fighters need not be in cancel reply.

The E-2 crews must still report a track to each F-14, a problem which should be corrected with FCDSSA tape A-6.

(U) The month of May was another banner month for the Black Eagles with 337.5 flight hours. It was highlighted by 2 major exercises: Beacon Flash 85-6 (11-15 May) and Glad Customer 16 May 1985. During the week prior to Beacon Flash, we flew daily AEW/SSC flights from dawn to 2200. On 7 May we encountered our only Iranian visitor for the month. An Iranian C-130 ws detected by the Black Eagles north of the CV in the Gulf of Oman. DLI were launched and the intercept accomplished at 207 NM.

(C) During Beacon Flash 85-5 the Black Eagles provided clearance control/flight advisories, Dissimilar Air Combat Training (DACT) Control, strike control to both the Sultan of Oman's Air Force (SOAF) and CVW-14 aircraft. While our real world AEW tasking

precluded us from working with the Masirah range, the Black Eagles were able to accomplish the most productive training of the cruise. Pilots were normally tasked with all clearance and liaison requirements passed through THUMRAIT Radar. This allowed one NFO to perform real world AEW and the other two to conduct overland training and control. DACT aircraft from CVW-14 were reported when they were 10 minutes from being "Feet Dry" thus allowing SOAF aircraft to launch from strip alert and optimizing everyone's training opportunities. Changes in scheduling were passed as quickly as they occurred which allowed CVW-14 to complete all scheduled events. Black Eagle crews when not tasked with AEW to the South, received excellent practice in tracking small, fast, low targets over land. On several events they participated in the SOAF command and control network giving "Heads Ups" calls on inbound raids via "Cross Tell" circuits. The SOAF Cross Tell Network was very good. On one event when communications could not be established with THUMRAIT Radar, raid aircraft detected by the Black Eagles were reported to Masirah Radar via UHF and relayed to THUMRAIT via telecommmunications in time for SAOF aircraft to get airborne. E-2 radar/Omani telecommunications interference was not a problem during Beacon Flash. All crews were briefed and operated only on radar channels 7, 81 9, 10. Only on the 14th when the Black Eagles were required to take a station overland north of Thumrait was there any complaint from SOAF controllers. As soon as SOAF notified the crew of telecommunications interference channel 7 was changed to a higher channel and the problem alleviated. At the same time a second E-2 stationed off the coast controlling the ingressing strike group operated on channel 7 with no noted degradation by SOAF. It appeared that stationing between SEEB and Thumrait had as much to do with the problem as did the radar frequency.

(C) On 14 May VAW-113 flew an Omani controller on two indoctrination flights out of Masirah. On the first flight the E-2 crew controlled Omani Hunters and Jaguars out of Masirah against CVW-14 strike aircraft. The E-2 stationed overland and by using AMTI-raw video tracked all inbound aircraft and picked up the Omani Jaguars off the deck at 180 NM. After landing for fuel and a face to face debrief with the Omani controllers, the second flight provided the Omani controller the opportunity to give bullseye calls from Thumrait to Omani Jaguars and Hunters to an incoming 24 plane strike. Again an overland station provided 100-200 NM detections of low flying aircraft. In both cases the E-2 crews found that giving bullseye calls over the Omani Crosstell Net provided all parties concerned with the best picture.

(C) On the last day of Beacon Flash the Black Eagles were scheduled for a SAREX when "AW" shifted their station to the East to cover an anticipated Cub and Candid launch out of Karachi. Another E-2 was launched to the South because Tipper information alerted us to a pending launch to the South because Tiper information alerted us to a pending launch of two Mays from Aden. The May threat was never realized in as much as they conducted only Gulf of Aden ops. With the help of the USS California's ESM suite, the eastern E-2C stationed 200 NM from the CV acquired radar contact at 463 NM from

the CV. F-14's under Black Eagle control visually identified a Candid at 30 NM and broke off escort when the contact was established on airway. An hour later a Cub was detected at 434 NM from the CV and intercepted at 284 NM.

(C) Glad Customer, (a B-52 Exercise) provided the airwing with the opportunity to exercise Chainsaw/Sawtooth tactics. The first E--2 launched 15 degrees left of the threat axis and proceeded out to 450 NM. The E-2 picked up and reported an air contact at 650 NM from the CV. The target was heading perpendicular to the threat axis. ESM from a surface picket confirmed the bogey as a B-52. The contact split with one turning inbound to the CV while the other proceeded North and tried to skirt the northern portion of the Grid. The inbound contact was intercepted at 410 NM and the second B-52 was intercepted at 300 NM. By the time a second E-2 was on station both intercepts were completed.

(C) NAS atmospherics still pose a problem to UHF and HF communications. E-2 altitude adjustments have proven to be the most successful method of maintaining/reestablishing good voice and data link communications with at least a portion of the BG D units. Special attention is paid to the upper level wind shears crews attempting to reamin just below them.

(C) Highly demanding operational tasking in the North Arabian Sea propelled the Black Eagles to a Pacific Fleet VAW record of 1149.5 flight hours for a single quarter. By the end of June we flew our second highest month of 397.7 flight hours encompassing 108 sorties. These impressive flight statistics include 88.8 percent FMC and 99.7 percent MC mission hours. No fly days for the Airwing were eight to twelve hour days for the Blackeagles. The Battle Group relied on the E2 to provide a long range air and surface surveillance picture no other platform could equal.

(C) Unusually heavy Iranian C-130 activity in the Gulf of Oman highlighted the month of June. We not only found the Iranians squawking the previous day's MODE I code but in one instance squawking one of the Airwing's MODE II codes. The PDS proved extremely beneficial in identifying Iranian F4 flights operating around Chah Bahar. The Soviets maintained their usual level of air activity out of Karachi, Tashkent and Aden. The Black Eagles controlled a total of ehight high interest intercepts; three AN-12 Cubs, four IL-28 Mays and one Iranian C-130. Detection normally occurred in the vicinity of 350 NM from the CV and the intercepts were completed between 230 NM and 300 NM. In addition to these intercepts, the Northern and Southern AAW picket ships controlled eight additional intercepts. Four were Iranian C-130's. A change in BG "D" OPGEN Juliett gave prioriity control of CAP stations to the various picket ships in order to allow the E2 to more effectively concentrate on its primary mission;AEW. A good example of BG "D" effectiveness occurred on 12 June during an IL-38 May turnover between Aden and Tashkent. During this ten hour evolution, four Mays and two Cubs were airborne simultaneously. The Black Eagles acquired first detection on their PDS and positive first radar

detection on five of the six although we were only tasked with location the Cubs. The E2 maintained the tactical airborne airborne picture while the picket ships ran the actual intercepts. Whenever we intercepted Mays during the month, they were generally found flying in section and splitting when the intercept was comsumated. On several occasions Omani twin propelles SSC aircraft were visually identified while operating threat to the Battle Group, the several twin prop aircraft which transitted through the NAS stimulated a lot of interest. Slow flyers were detected flying south to the Seychelles and between India and the Gulf states.

(C) Our remarkable 93 percent PDS availability allowed the Black Eagles to passively detect Iranian F4/P3 and Soviet May/Cub emitters at 300 NM and to electronically identify commercial airliners and aircraft of interest before VIDS were made. It also allowed us to more easily locate British and French Naval ships operation in the NAS.

(C) On 13 June, the Black Eagles participated in a day long Multiplex. Units involved included BG "D", French and Royal Navy warships. The airborne E2 successfully eoordinated the SSC effort that located all Orange units were founnd prior to the second E2 launching. The Black Eagles controlled five war at sea strikes, targeted two Orange units for simulated Harpoon firings from USS California and ran all EMCON departures and recoveries.

(C) VAW-113 led two over the horizon (OTH) passive targeting exercises. The E2 and EA6B proved to be the most effective ESM platforms. In each case, they provided ESM fixes accurate enough to complete simulated Tomahawk shots. Similar exercises are planned for July.

(C) The Black Eagles as a special project initiated extensive research and testing of the Link 4A Fighter link reference point (FLRP) which resulted in the initiation of a Link 4A Software Change Operational Requirement letter from CVW 14. We determined that the existing FLRP software did not allow for the necessary 250 NM to 400 NM coverage needed from FLRP to cover the outer air battle in a vector logic scenario. The restricted 256 NM uplink and 128 NM downlink reported ranges from FLRP precluded the use of FLRP at Vector Logic Grid Center. VAW 113 recognized the urgency in software change proposal to increase the maximum slant range in the Link 4A V-2 and R-3A messages to 512 NM from FLRP North/South and East/West.

(C) Atmospherics in the NAS contimued to be an enigma. Communications quality and range varied from outstanding to poor in any twenty-four hour period. Ducting conditions existed consistently between 500 and 5000 feet. A one to two NM visibility was common below 5000 feet thus requiring day case three recoveries on a regular basis. On the night of 18 June, several aircraft as well as BG "D" surface ships reported an unusual atmospheric light source to the north. The phenomena was described as Andes Lightning. The glow was caused by a slow dissipation of an electro-static field created by dry, dust filled air. A southwest monsoon

was believed to be the source of this statically charged dust filled air on it's travel over northern Africa and into mountainous central Iran.

(C) During the past year, the Black Eagles tested and used the KY58. An overall declining performance trend in the KY58 was noted by aircrew. Nontheless, its performance is still significantly better than the KY28. Two design deficiencies arose in keying the KY58 with the KYK13. These related to the inner rubber ring and the soft metal nubs on the inside of the female fitting of the KYK13. After only a few careful keyings, the rubber ring frayed and would sometimes pop out. The soft metal nubs easily became stripped and worn. Placing a small amount of water on the rubber seal acted as a lubricant and reduced fraying.

(U) The Black Eagles initiated eight ATDS Progress Change Proposals and two trouble reports and submitted them to FCDSSA, San Diego.

(C) The month of July saw a winding down of the demanding flight opertions requiring of us during our last three months in the NOrth Arabian Sea (NAS). On 9 July, BG "A" and the USS MIDWAY relieved us on Gonzo Station after a one day PASSEX where CVW-14 provided raids simulating the aircraft profiles we encountered during our stay in liberty in Perth, Western Australia. It would be inaccurate to describe the visit as a "rest period".

(C) While in the NAS, the Black Eagles detected an An-12 Cub and an IL-62 Classic. Both aircraft were detected in excess of 350 NM from the CV. On 5 July 2 Pakistani Atlantiques were detected and intercepted conducting ASW operations east of the BG. Iran continued to maintain almost daily C-130 surface surveillance missions in the Gulf of Oman. The E-2 provided long range, low level detection and surveillance, largely unavailable to the surface pickets because of the severe, summer, atmospheric conditions of the NAS.

(C) A total of three over the horizon (OTH) passive targeting exercises took place during the month. As the disignated mission lead for each one, the E-2 effectively utilized its communications and PDS suites in conjunction whthh EA-3, EA6, S-3 and shipboard ESM suites to passively detect and track cooperative emitting targets. The largest and most successful OTH passive targeting exercise occurred on 3 July while still on station in the NAS. Two cooperative targets were passively tracked enroute to rendzvous with BG "D". Working closely with "AE" and "AS", the E-2 detected numerous ESM rackets on the emitters at ranges approaching 350 NM. The E-2 correlated the racket craft to optimize crossfixes and developed accurate EW fixes on the targets.

(C) During the rest of the month, BG "D" transitted the I.O. enroute to Western Australia and then north through the Lombok, Makassar and Mindoro Straits to Subic Bay. Owing to the long transit distances and relative low threat, there were nine no fly days during the month. The reduced operational demands allowed the

Blackeagles to complete three pilot stan checks and participate in several VIP flight demonstrations. Additionally, we completed our curise gola of getting graded COMPEXs and 100 percent Liberty Elite qualifications on every Black Eagle aircrewman in each warfare area.

(C) The Black Eagles departed Subic Bay, R.P. on 3 August 1985 and set course for home. The only obstacle in the way was a 36 hour Extendex/Passex whth the USS Kitty Hawk and CVW Nine. On the first day of the exercise VAW-113 was tasked with coordination and control of multiple war-at-sea strikes against various units of BG Bravo. On the next day the Black Eagles set up a perimeter defense and controlled CAP against CVW Nine raid aircraft.

(C) At various times during the Passex, real-world Bear activity cancelled or postponed the exercise. With BG "B" transiting north of our track, initial detections were made by VAW-112 on both days. CVW Nine fighters passed escort responsibility to CVW Fourteen fighters under the control of the Black Eagles when the Bears transited within 300 NM of the Connie. Once again the Bears attempted to locate the BG Delta high value unit with no success.

(U) The remainder of the curise included a two and a half day port visit in Pearl Harbor, Hawaii to pick up 850 Connie Tigers; followed by a six day transit to San Diego.

(C) The Black Eagles spent most of September renewing familu ties and settling into new hangar spaces. Flight were made this month to get pilots back up to speed on airways navigation/FAA procedures and to evaluate backend systems. We transferred one aircraft to VAW 88 and sent one aircraft to SDLM.

(U) The month of October saw the Black Eagles flying in support of several projects.

(C) From 1-7 October we flew range control for CNO Project 108-1, (Harpoon Missile Shot) and CNO Project 251, (Tomahawk Missile Shot).

(C) From 7-10 October the Black Eagles flew Orange Air Control for Comptuex 86-1, controlling strikes against the USS Enterprise Battle Group.

(C) On 17 October the Black Eagles provided strike control for the Topgun graduation exercie; an Alpha-Strike into R-2524.

(C) On the 22nd and 24th of October we worked with PMTC and VX-4, testing and evaluating the new F-14 LINK-4A tape.

(C) The Black Eagles month on November was highlighted by our participation in Red Flag 86-1. From an operational stand point we were able to het good Link-11 training with the AWACS participating in Red Flag. In our role as Red Air control we maximized the AIC training controlling numerous many vs the entire exercise, the anticipated Alfa Strike control never came about.

BLACK EAGLE MAINTENANCE NARRATIVE 1985

(U) The two week at-sea period proved to be a highly successful one for the Black Eagles maintenance team. Our "professional maintainers", of each and every rate provided the "Connin Airwing" with the only 100% sortie completion rate for the entire at-sea period. Front and back ends remained up and ready for every launch of the Battle Group and Operational Readiness Evaluations. The overall effort and inpressive performance by the Maintenance team received outstanding comments from our ORE Observers.

(U) Problem areas this month were temporary in nature. Test equipment on board for testing WRA 30's and MDU's was not available and trained personnel to troubleshoot the RT-980, couplers and tacans were TAD to their respective schools.

(U) Upon our return to NAS Miramar, we received our fifth E-2C and are presently conducting the acceptance inspection and preparing our other aircraft for deployment. With our POM period half complete, this highly charged and motivated maintenance team is ready to cruise and set the pace for "Connie" and CVW-14.

(C) February 1985 opened with the receipt of our fifth and oldest (158643) aircraft. Side number 655 was chosen by higher authority due to side number/IFF correspondence considerations. This event represents a first for the Black Eagles, and makes us the second fleet E-2C squadron to deploy with five aircraft. Although February was a designated POM period, a substantial effort was required by all hands to ensure all five aircraft were FMC prior to deployment - a major task in itself. Further "complications" included: one engine change, one propeller change, one rotodome gearbox change, one 365 day rudder inspection and depot level repair on four aircraft for horizontal stabilizer and rudder corrosion.

(C) We owe special thanks to COMFITAEWWINGPAC and the entire Miramar based E-2 community for the considerable assistance provided in these endeavors. Honorable mentions go to VAW-110, VAW-112, VAW-116, VAW-117 and LCDR Gorrell and AVCM Snider of COMFITAEWWINGPAC for critical supply assistance and moral support during our shipboard transition.

(C) The permanent loan of a 30 foot extension cord has helped provide necessary power support. Elevator runs to the hangar deck for major maintenance (drop check, prop change, etc.) have been provided expeditiously when required. The development of a propeller vibration analyzer (PVA) test set suitable for use onboard a carrier is an obvious operational requirement in need to change an otherwise serviceable prop. The bulkhead location of the spare propeller in the hangar bay should be a cause of concern. Improper locations require a major respot effort to gain access. So far, the fifth aircraft has proven to be an asset as a means for parts verification - improving turnaround time. Future efforts are being directed at utilizating it as an Avionics components quick test platform.

(U) Although the statistics may not show it, troubleshooting techniques, publications familiarity and overall maintenance department procedures improved considerably during the past month. Major setbacks involving a radar overheat, incorrect aircraft wiring in two aircraft and three wing leading edge crunches had a signification impact on an otherwise excellent readiness level.

(C) Buno 158643 flew its first MC hop since receipt after correction of: a radar screamer which ran backwards due to improper wiring; numerous wiring discrepancies in the rotodome and differential generator which caused no radar sweep; CAINS wiring discrepancies which caused multiple CAU power transformer and input filter "smokes" upon power application.

(C) Poor WRA reliability continues to impact overall radar and PDS system performance.

(U) In spite of a rather abysmal start to our operations leaving Singapore, April 1985 rapidly became a month of milestones and records for the Black Eagles Maintenance Department. Although we left Singapore with three mission capable aircraft, a combination of simultaneous failures on different aircraft involving stuck flaps, crunched wing leading edges with deicer boots which wouldn't fit, chip lights on two different aircraft, two vapor cycle failures, one badly smoked radar and a rotodome flower pot/differential generator failure brought our overall readiness rate to zero, one day out of port. Through a tremendous 19 hour/day work effort from many of our personnel we achieved a full recovery to 100% mission capable rate within two days an a 100% FMC rate within five days. Our Maintenance personnel continued this superlative performance throughout the month, achieving a 100% sorties completion rate for virtually the entire month while our aircraft flew a total of 414.4 flight hours. A new Black Eagle (and possibly WESTPAC) record. An equally important milestone occurred on 19 April when our "newest" aircraft (655) flew its first FMC flight. An appropriate cake cutting ceremony was held in recognition of the 2,240 direct maintenance man hours involved in this effort. The additional hours expended in discussion, troubleshooting, scrutinizing maintenance manuals and wiring diagrams involving this aircraft are too numerous to mention. This aircraft has now become the squadron "Cadillac", an aircraft which crews prefer to fly over all the other's.

(U) Temperature and humidity continue to impact maintenance requirements on both Avionics systems and vapor cycles. High temperatures coupled with jet engine exhaust induction have decreased on deck efficiency and caused numerous overtemperatures faults. Operation in manual mode on deck has helped to alleviate many problems. The auto mode is incapable of keeping up with the rapid temperature changes. Our thanks to tech reps Jim Bartels and Dave Metz for their helpful hints on this one. Numerous radar problems and faults have been attributed to condensation and moisture collection in and around high voltage connectors, inspite of long system dry-out operation. Additionally, radar cooling fans (screamers) have experienced premature bearing failures. Cause unknown.

(U) Engine side lateral mounts should be routinely checked whenever a lower engine mount is replaced. Lateral engine movement was discovered to be the cause of multiple lower engine mount failures on one aircraft; not a bleed air cooling malfunction as originally suspected.

(U) Multiple failure of some items depleted small stock and overtasked the supply system. Excessive supply response times have become routine for some specific items and certain systems. Slow restocking of ship's assets, at a lower priority than our own NMCS/PMCS requisition often presented a problem for those multiple list items. We experienced multiple hits on many items, including the following: Converter amplifier units, vanaxial fans, vapor cycles, trailing wire and fixed wire antenna parts, and band pass filters.

(U) Varying, but nonetheless frequent problems with the PDS and HF systems in the aircraft were major contributes to our NORS lists. Radio frequency amplifiers, receiver converters, signal pulse analyzers, digital data computers, signal control processors and receivers (among others) were problem items. AIMD response was good but all were AWP for varying, often lengthly periods. Among HF items, supply response, again particularly for AWP's, was frustratingly slow for power supply amplifiers, band pass filters, equipment racks, antennas and wire, and cannister assemblies. A recurring landing gear problem, that defies our best troubleshooting efforts, illuminated the difficulty of obtaining actuators, uplock/downlock switches, and other miscellaneous strut components.

(U) Acquisition of engine air starters from a deployed stock was very time consuming. Environmental and operational conditions, combined with inherent problems with the Air Research starters resulted in several NMCS requisitions. The preference for Bedix replacements and obtaining applicable adapters was also a challenge; supply response was again slow.

(U) Many itmes which should have been in stock on the ship were not, or else could not be readily located, resulting in cannibalizations which might have been avoided. AIMD repair capabililty has been very good; but anything passed off ship has been time consuming.

(U) Off ship requisitions for HF trailing antenna wire continue to return as partial fills (i.e. 102 ft., 92 ft., 38 ft.,). This wire should be shipped in 150 ft lengths, or <u>full</u> spools. Partial fills can not be spliced to the correct length, resulting in long re-order delays. Separate supply message traffic may be necessary to ensure full spool receipt.

(U) May has been another productive month for the Black Eagle Maintenance Department. Our personnel continued the trend established last month by achieving a 99% sortie completion rate while our aircraft flew 337 flight hours. Our departmental goal is

to continue to strive for 80% FMC aircraft availability, in order to meet the demanding operational tasking required of us.

(U) Primary maintenance emphasis has been focused toward the approaching mid-cruise aircraft material condition inspection in June. Using the CNAP inspection guide as a reference our AMO, LCDR Roy Clingenpeel, developed a detailed PAO&M to review all maintenance programs and administrative procedures for strict compliance. A pre-inspection review by key CVW-14 maintenance inspectors revealed only a few minor discrepancies. All assigned aircraft are in very good material condition.

(U) Several repeat landing gear and binding rudder discrepancies have been partially attributed to insufficient lubrication. Although the MRC Deck is followed each time - indicating the location of all lubrication fittings - no technial explanation is given regarding the proper amount of lubrication to be provided; nor how to determine whether the grease injected is really doing the job. Our thanks to GAC Rep. Mr. Dave Metz for his training program to correct this deficiency in our maintenance procedures. Although many of our AM's have years of experience on E-2 and other fleet aircraft, none have attended a course specifically directed at proper aircraft lubrication procedures. There appears to be a definite need for FRAMP instruction in proper and sufficient aircraft lubrication, directed at eliminating this maintenance training deficiency in future fleet replacement personnel.

(U) PDS component reliability/availability degraded otherwise excellent FMC reporting statistics. The recent receipt of component repair SRA's for WRA-15's and WRA-11's is no allowing AIMD to provide RFI units and FMC statistics are starting to improve.

(U) Lack of Air Turbine Starters continues to be a problem. The AVCAL had sufficient assets, but restocking has been slow. Cannibalization from all available sources has been necessary to maintain FMC aircraft availability.

(U) June has been another record setting month for the Black Eagle Maintenance Department. Completing the third quarter, we achieved a Pacific Fleet VAW record of 1,149.5 flight hours for the quarter and flew 398 sorties with a 98% sortie completion rate and 89% FMC rate for the month of June. We were tasked to provide AEW coverage even on no-fly days. Our Hawkeyes were the first to launch at dawn's early light and the last to recover at night in order to maintain continuous AEW surveillance. We're proud of all our maintenance personnel and the tremendous effort they put forth in achieving these statistics.

(U) An intermittent and persistent landing gear down and locked indication discrepancy on Black Eagle 603 continues to be a high manhour consumer for the Electronics and Metalsmiths, impacting an otherwise exceptional MC rate. Although all wiring has been checked, all suspicious connections repaired, and every hydraulic/mechanical component replaced or adjusted, the problem is yet to be totally resolved. Consultation with GAC engineering is in progress.

(U) Lack of flap exhaust heat shields in WESTPAC has caused some difficulty. E-2A/B heat shields, also in short supply, were quickly depleted. A temporary fix for a deteriorated heat shield was devised by GAC Rep Mr. Dave Metz and out Metalsmiths. This consisted of using an asbestos blanket held in place and covered by high temp permatex sealing compound and a titanium plate provided by CV-64 AIMD. It has survived over 80 flight hours with no signs of deterioration or damge to the flaps.

(U) High ambient temperatures and jet engine exhaust on deck continue to take a high toll on vanaxial fans and aircycle turbines in both the radar and environmental cooling systems. To counter the effects of high humidity and condensation, a standard policy of dehumidifying the systems prior to energizing any electronic or electrical equipment has met with considerable success. Avionic systems reliability has increased with a noticeable decrease in interior corrosion discrepancies.

(U) Stiff winglock handle problems have been attributed to winglock flag teleflex cable corrosion. This area was given particular attention prior to deployment but must be reemphasized in the salt air environment.

(U) Aircraft cleanliness continues to be a problem. The Arabian dust/sand storms turn into airborne mud at altitude. This not only erodes the surface but also embeds in the paint, leaving a rough sticky surface that is very difficult to effectively clean.

(U) Efforts put forth in preparation for the Mid-Cruise evaluation paid big dividends. All aircraft are in satisfactory material condition and all programs continue to run smoothly. Although slightly abbreviated due to operational commitments and the COMFAIRWESTPAC inspectors' schedule, the aircraft received the thorough inspection for which COMFAIRWESTPAC is known. Central control by our AMO, LCDR Roy Clingenpeel, was the key to success in this evolution.

(U) July was an excellent month for the Blackeagle Maintenance Department. Although operational commitments were reduced due to our departure from the North Arabian Sea enroute to a well-deserved visit to Perth, we still managed to fly 235.4 flight hours with a 98% sortie completion rate. July also marked the first time during the cruise that we were able to consistently maintain our primary goal of 80% FMC aircraft availability.

(U) The cabin pressurization and equipment cooling problems previously experienced disappeared completely in the cooler, dryer air new Australia. The cool nights and limited flight operations were not entirely kind, however. Hydraulic leaks in actuators and check valves became more frequent.

(U) The intermittent landing gear discrepancy on Black Eagle 603 (referred to in both the May and June MOR's) was finally corrected. The culprit was a faulty main landing gear door time check value. This value allowed small amounts of air to enter the combined hydraulic system during each operating cycle. The system performed flawlessly on every dropcheck and functioned normally inflight for 3-7 flights before sufficient air was introduced to the MLG actuator. A half cycle of the gear handle was all that was required to achieve a down and locked indication. The true nature of the problem remained unsolved until the gear was blown down during the Phase "A" inspection - releasing a large quantity of trapped hydraulic fluid. We strongly recommend performing a full Phase "A" MLG work package anytime that any landing gear discrepancies are encountered. We could have saved untold troubleshooting manhours, significantly improved our FMC availability, and reduced the MO's anxiety factor.

(U) Recurring electrical malfunctions on Black Eagle 602 rose to plague our electricians. Numerous, seemingly unrelated discrepancies were eventually traced to a small, chafed wire in the tail junction box. Cascading failures resulted in casualties to one pitchfeel increase relay, one weight on wheels relay, one impact pressure transducer, one advisory lights panel, and two master caution panels.

BLACK EAGLE TRAINING NARRATIVE 1985

(U) Thanks to both VAW-110 CAEWWS and TOPGUN we have enhanced our deployed training program with quality training aids. Highly recommend all squadrons take full advantage of our communities advanced tactics school and NFW's. The indexed MOR data base, lesson guide and video tapes provide a lot of lessons to learn the easy way.

(U) The MTIPS program was first implemented in VAW-113 during the month of March. Initial testing to determine our overall level of knowledge was completed and MTIPS training on the ship level will begin in April. MTIPS has been very well received in VAW-113, and it promises to be a very beneficial program.

(C) Refractivity: Indian Ocean atmosperics and its impact on the radar and communications has emphasized the need for dedicated ground training to review the effects of propagation and procedures to counter and recognized those effects. The VAW-116 publication Indian Ocean and Enroute Operations handout and the Carrier Airborne Early Warning Weapons School slide presentation and lesson guide on tactical implications of refractivity have been particularly useful and and highly recommended. Specific problems encountered included degraded detection ranges and multiple time ground echoes. The combination of both references mentioned address these and other topics very well. If you're heading to the I.O. this is a worthwhile training subject.

(C) ALQ-167: CV-64 has received the ALQ-167 pods on a cross deck from USS Vinson. We are looking forward to taking full advantage of the pods in the upcoming month. It is highly recommended that Training Officers actively pursue these assets early enough to ensure their availability and emphasize their importance.

(C) MTIPS: MTIPS is proving to be a very valuable asset. As always formal maintenance training time is a precious commodity, however, thanks to MTIPS quality training aids are not a problem. The MTIPS package we are now using is exceptional. The overheads, diagrams, lesson guides and tests are long overdue. In fact some of the materials have proven to be more accurate than the publications and easier to follow. We are currently using the package to supplement our in-shop presentations. Both shop members and technical representatives use the lessons for presentations. In March we completed all the tests to establish a starting point and identify deficiencies. In April we conducted over 30 hours of fomal training utilizing the MTIPS package. MTIPS is the answer to standardized and quality lesson guides. It is about time we treated maintenance training on the professional level it deserves. This program is a must for the community. Thanks to LCDR Gorrell for this initial package.

(U) Congratulations to our newly designated CAPC LT Steve Ogles, and our new CICO's LT Sam Larioza, LTJG Gerald Hehe, LTJG Mark Poole and LTJG "Chip" Seitz.

(C) Compexes: Exceptional cooperation from CV-64 Strike Ops and fellow airwing squadrons have allowed us to complete Compexes in all areas on a routine basis. Each day one event and the necessary assets are scheduled for an E-2C Compex, including E-2 controlled approaches, SAREX's and lost plane exercises. By submitting a complete list of the type and number of Compexes required to qualify each crew member we have been able to coordinate Strike Ops requirements with our own. The results have been a variety of challenging flights, and friendly competition among aircrew to see who can get the most individual E's.

(C) ALQ-167 POD: Although we have two ALQ-167 PODS onboard, both have been down since their arrival last month. This has severely hindered our programmed EW training for the last month. VAQ-139 has been very helpful in providing IFF Jamming, but radar Jammin PMA qualifications are in jeopardy unless the parts are received to repair the ALQ-167 PODS.

(C) Aircrew Designations: Congratulations to our new designated aircrew:

CICO:	LTJG "Butch" Lugtu
ACO:	LTJG Cole "Quail" Cowden
	LTJG Mike "Bull" Shearn
	LTJG John "Bif" Fleming
	LTJG Bob "YB" Sonner
2P	LTJG "Cap" Haigler
	LTJG John "Gumby" Gombar
	LTJG Mike "Wags" Wagner

(C) ALQ-167 POD: Both ALQ-167 PODS remained down for the month of June. The PODS have been AWP since we received them on a crossdeck from the USS Carl Vinson. Without the PODS we are unable to conduct radar jamming exercises. It is imperative that the ALQ-167 POD availability be increased and that VAW squadrons place a greater emphasis on their use and maintenance. Early coordination with the VAQ squadron is only the first step in insuring this training asset is available.

(C) VAW-113 participated in the first Composite Warfare Support Training Course taught by VAW-110 Carrier Airborne Early Warning Weapons School (CAEWS). The course provides a good review of the basics of AAW then leads into a variety of other topics including AWACS interoperability, friendly capabilities and Soviet tactics. The course represents a very important step for the entire community. With continued support this program will most certainly evolve into a graduate level course that will provide squadrons with the tools they need to conduct an effective Turnaround Training Program.

(C) TOPGUN: OSC Mower, a GCI instructor at Navy Fighter Weapons School, recently gave the NFO's a brief, covering Threat Formations and Tactics, Decoy Tactics, and ACM RT, in preparation for Red Flag. Chief Mower's tailored brief was excellent and is highly recommended for all squarons in preparation for Red Flag, FFARP or any ACM exercise.

(C) 15F8A: One of our initial objectives in our Turnaround Training was to qualify the pilots as "bug runners" on the 15F8A. Using the pilots as console operators provides some options for schedules, allows us to run some of the more complex problems with more available operators, and exposes the pilots to the missions and what is really going on in the back end. We schedule one full crew and one master instructor who has been through the VAW-110 15F8A course. Not only has this program been successful, but when their backs have actually been pinned to the wall, the pilots will confess to enjoying the experience.

BLACK EAGLE SAFETY NARRATIVE 1985 (U)

(U) January was a productive month for the Safety Department. Following the holiday period, a day long Safety Standown was conducted. All lectures and training evolutions were geared toward our upcoming ORE and WESTPAC Deployment. The NAS Miramar Physiology training group provided cold water survival and predeployment stress reduction lectures. The highlight of the day was ditch and bailout drills conducted in full cold weather flight gear. It was an eye opener for everyone involved. When was the last time your squadron inventoried, inspected and checked the fit of your cold weather survival gear?

(U) We finished the month up with extensive CV Ops in conjunction with our ORE. Once again the E2 human safety chain paid big dividends. There were two instances in one day of a "blue shirt" and "red shirt" crash crew member trying to chop themselves up. I cannot over emphasis the importance of the safety chain and the requirement for the members of the chain to stay alert!

(U) Safety spent the first part of the month preparing for the deployment. STAN checks were completed early, and all pilots and NFO's within the 60 day window completed IFTD. Since deployment, the Safety Department has concentrated on shipboard safety. A safety inspection of all spaces was completed and blindfold egress drills conductd for each squadron member from his berthing/stateroom.

(U) E-2 props continue to pose problems on the flight deck. Despite extensive training and indoctrination of all flight deck personnel our "Human Safety Chain" continues to save people on a regular basis.

(U) The month of March was a productive month for the Safety Department. On the 15th the squadron conducted a Safety Standown in conjunction with the airwing and ship. Personnel assigned to the flight deck participated in helo hoist demonstrations. The aircrew reviewed airborne crew switch procedures and formulated an emergency landing matrix to assist our tower flowers in determining what type of recovery to recommend to the air boss (i.e. normal, pull forward or next available). On the 21st we took advantage of a no fly day and requested VAQ-139 conduct a command safety survey. The inspectors left with an outstanding impression of the Black Eagles and several good ideas to incorporate into their own safety program.

(U) Throughout the month of March we conducted lectures on hazardous liberty ashore, boating safety and tips on surviving Olongapo liberty. We wrapped up the month on a positive note with zero mishaps or injuries.

(U) A ship wide Safety Standown was conducted on 11 April. The Black Eagles used this unexpected opportunity to conduct an in-hous safety standown. It provided valuable training at all levels within the command.

(U) During USS Constellation Quarters, AMS1 Shaw was presented the COMFITAEWWINPAC Pro-of-the-Week award by CAPT Calhoun, Commanding Officer, USS Constellation. The award was presented to AMS1 Shaw for his quick action which prevented a Connie crash crewman from taking a short cut through turning E-2 prop. This incident combined with several nearly identical others, have proven that the "Human Safety Chain" must be in place whenever you have a E-2 turning on the flight deck. The squadron passed 12,000 safe flying hours on the 24th of April.

(U) Monthly Safety Standown are the standard while attached to the 7th Fleet. The squadron held the May Standown on the first day out of Mombasa. Emphasis was directed towards a CV NATOPS review, high winds, pitching decks and low visibility flying.

(U) Our quarterly ditch and bailout drills were held in the afternoon of the standown with some interesting results. Crews were assembled and required to brief both ditch and bailout procedures. A safety representative then flashed a card with either the work "Ditch" or "Bailout". The crew then performed the appropriate drill. The interesting part was that one co-pilot performed ditching procedures while everyone else in this crew bailed out, and another crew had a crew member improperly route his ICS cord under his shoulder strap during a bailout. The end result was a very beneficial drill for all aircrew.

(U) June was not only a extremely productive month operationally but a safe month for the Black Eagles. We completed the record setting month with zero mishaps or personal injuries. Complacency, pitching flights decks and wet ladders combined with the endless routine of Gonzo Station tested our command's safety awareness posture. Aggressive prosecution of all safety programs and instructions have kept the "Gonzo Bug" from biting.

(U) The squadron completed 7 years accident free on 1 July and passed 13,000 hours mishap free on 26 July.

(U) July was our transition period from the mid-cruise blues to get-home-itis. With the high paced operations of the North Arabian Sea behind us and San Diego seemingly just over the horizon, it was time to stress the continued importance of adherence to established safety programs during the remainder of the deployment. The Safety Department's goal has been to eliminate complacency during these known let-down periods through Safety Standowns, Workcenter Safety Training and POD notes. Upon leaving Perth the squadron conducted a standown focused on safe operations through the fly off and into the post cruise standown.

(U) We almost discovered the hard way a missing link in our human safety chain. With two E-2's parked side by side, in the hummer hole, a troubleshooting entered the forward aircraft which was already turning. While he was occupied inside the forward aircraft the aft E-2 started it's engine. When finished, the troubleshooter exited the forward aircraft, went behind the port

nacelle, proceeded outboard to clear the port prop arc, turned right to go forward and almost walked into the starboard prop of the E-2. Fortunately the troubleshooter realized the situation at the last momemt and a side-step to the right saved his life as he passed between the two turning props. A special retraining session was held to highlight this very hazardous situation. Does your squadron have a missing link in your human safety chain?

(U) Float Coats. During random inspection of float coats the Safety Department discovered that the inflation labe would twist in the shoulder area from repeated donning and removal, preventing complete inflation by the CO2 or oral inflation system. Current inspection procedures only require the internal inflation labe to be inspected on a quarterly basis. The squadron has added the requirement to check the internal lobe for twisting on a daily basis. VAW-113 Hazard Report 01-85 will recommend the daily inspection of the lobe and a change in the design to prevent the lobe from twisting during use.

(U) In November, the Safety Department initiated steps to heighten the safety awareness of squadron personnel who ride motorcycles. The first step was a questionaire involving both safety facts and survey questions. The results are being used to determine the experience level of those who ride as well as the types of riding they do and their safety awareness. From this start we seek to create a situation where those who choose to ride motorcycles know and use safety precautions.