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SCHEDULE OF EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED AT TWO YEAR
INTERVALS. DECLASSIFIED ON 12/1/73
BY 1973

AIR RESCUE SERVICE BRIEFING

SOUTHEAST ASIA SAR REQUIREMENTS (1965)

17 Feb 1965

Presented to Comdr MATS
by Hq ARS

PROJECT CORONA HARVEST

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CHART #1 - ON (SEA AREA)

IN THIS PRESENTATION WE WILL EVALUATE BOTH THE PACAF AND THE
ARS PROPOSALS TO MEET THE CURRENT AND PROJECTED SOUTHEAST ASIA
SEARCH, RESCUE AND RECOVERY REQUIREMENTS.

IN OCT 1964, HQ ARS REQUESTED THE PACIFIC AIR RESCUE CENTER (IN
ARS MSG ARXDC 50004, 5 OCT 64) TO DETERMINE AND PROJECT AS FAR AS
POSSIBLE INTO THE FUTURE THE SAR REQUIREMENTS IN SOUTHEAST ASIA.
IN REPLY, CINCPACAF AND PARC CONDUCTED A JOINT STUDY OF THESE
REQUIREMENTS AND SUBMITTED THEIR FINDINGS SIMULTANEOUSLY TO HQ
MATS AND HQ ARS (15 DEC 64). IT IS THIS REPLY, THAT WE HAVE ANALYZED
ALONG WITH THE GUIDELINES PROVIDED BY HQ MATS (MAXDC 50012, JAN 65).

CHART #1A - ON

THESE GUIDELINES ARE:

1. IDENTIFY ARS RESOURCES RECOMMENDED FOR DIVERSION, TO
SATISFY THE SEA REQUIREMENT.

2. DELINEATE IMPACT ON SUPPORT OF USAF REQUIREMENTS AS

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3. OUTLINE EXACTLY THE ARS COMMAND ARRANGEMENTS IN SEA.
4. CONSIDER THE ESTABLISHMENT OF A SQUADRON IN THE AREA.
5. IDENTIFY THE SPECIFIC AND TOTAL MANPOWER COSTS AS WELL

AS A SOURCE OF THE SPACES.

6. TDY REQUIREMENT SHOULD BE ELIMINATED OR HELD TO A
MINIMUM.

7. ESTIMATE OF AIRCRAFT PROCUREMENT MODIFICATION COSTS.

WE HAVE USED THESE 7 MATS GUIDES TO MEASURE BOTH THE PACAF
PROPOSAL AND OUR (ARS) PROPOSAL.

CHART #2 - ON (SEA SAR MISSIONS)

HERE ARE THE MISSIONS FOR WHICH WE MUST PROVIDE COMBAT AIRCREW
SAR COVERAGE.

CHART #3 - ON (SEA SAR MISSIONS)

CHART #4 - ON (SEA SAR MISSIONS)

CHART #5 - ON (S. E. ASIA MAP - BLACK
& WHITE OUTLINE)

THIS CHART DEPICTS OUR POSTURE TODAY IN SEA.

PCS 3 HH-43F'S

PCS 3 HH-43F'S

PCS (Det 3 - Control
Element)

DA NANG, RVN

KORAT, THAILAND

TAN SON NHUT, SAIGON

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TDY	3 HH-43B'S	NAKHON PHANOM, THAILAND
TDY (ZI RESOURCE)	2 HH-43B'S	KORAT, THAILAND
TDY (ZI RESOURCE)	2 HH-43B'S	TAHKLI, THAILAND

CHART #5A - OVERLAY

SINCE JUNE 1964 WE HAVE ALSO DEPLOYED AS MANY AS 5 HU-16'S IN SEA FROM RESOURCES OF THE 31 ARSQ (CLARK) AND 33 ARSQ (OKINAWA). THESE AIRCRAFT ARE OPERATING TDY FROM DA NANG, RVN AND KORAT, THAILAND.

CHART #5B - ON

A TOTAL OF 86 MANPOWER SPACES ARE NOW AUTHORIZED IN RVN. 37 SPACES EACH FOR THE TWO HH-43F HELICOPTER DETACHMENTS AND 12 SPACES FOR DET 3, THE JSARC. DET 3 CONTROLS ALL OF THE ACTIONS OF THE 6 HH-43B'S, THE 7 UNMODIFIED HH-43B'S AND THE HU-16 TDY AIRCRAFT. THESE 18 AIRCRAFT AND THEIR ATTENDANT RESOURCES NOW REPRESENT THE TOTAL AIR RESCUE SERVICE SEA SAR FORCE.

CHART #6 - ON (PACAF PROPOSAL)

THIS SHOWS THE FORCE POSTURE RECOMMENDED BY PACAF.

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(Starting in the North)	HH-3C	HH-43B	TOTAL
1. Da Nang, RVN	3	3	6
2. Pleiku, RVN	3		3
3. Bien Hoa, RVN	3	3	6
4. Can Tho, RVN	3		3
5. Nakhon Phanom	3		3
6. Korat, Thailand		2	2
7. Takhli, Thailand		2	2

PACAF'S TOTAL REQUIREMENT IS 25 HELICOPTERS

15 HH-3C'S

6 HH-43F'S

4 HH-43B'S

AND A CONTINUED EMPLOYMENT OF 5 TDY HU-16'S.

CHART #6A - OVERLAY - ON

IN THE PACAF SEA FORCE PROPOSAL, 30 AIRFRAMES WOULD BE REQUIRED,
WITH A MANPOWER ADDITIVE COST OF 370 SPACES.

UNTIL SUFFICIENT MODIFIED CH-3C AIRCRAFT CAN BE MADE AVAILABLE
PACAF REQUESTS THAT 12 ADDITIONAL HH-43F'S BE PLACED IN SEA.

1. 3 AT DA NANG
2. 3 AT PLEIKU
3. 3 AT BIEN HOA
4. 3 AT CAN THO

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THIS REQUEST DOESN'T CHANGE THE TOTAL REQUIREMENT OF 30 AIRFRAMES - 25 HELICOPTERS AND 5 FIXED - WING AIRCRAFT.

IN OUR ANALYSIS OF THIS PROBLEM, WE CONCLUDED THAT NO COMMAND STRUCTURE WOULD BE SATISFACTORY UNLESS A PCS SQUADRON WAS FORMED IN THE AREA FOR POSITIVE COMMAND, CONTROL AND EFFECTIVE LOGISTIC SUPPORT, THIS TO INCLUDE AIRCRAFT AND PERSONNEL. THE PACAF PROPOSAL DID NOT SUGGEST A SEA SQUADRON NOR DID THEY RECOMMEND AN ALL PCS FORCE. HOWEVER, HQ MATS GUIDELINES DID RECOMMEND THIS BE CONSIDERED. WE BELIEVE IT A VALID REQUIREMENT, THEREFORE, THE MANPOWER FIGURES SHOWN REFLECT AN ALL PCS FORCE INCLUDING A SQUADRON.

(Also a Hq USAF msg recommended a PCS force)

CHART #7 - ON

FOLLOWING AN ALERTING MESSAGE FROM THE AIR FORCE CHIEF OF STAFF TO HQ MATS AND HQ ARS, A MEETING WAS HELD AT ORLANDO AFB BETWEEN HQ USAF PERSONNEL WORKING ON THIS PROGRAM AND GENERAL WILLIAMS AND HIS STAFF. IN THIS MEETING WE CONSIDERED:

1. THE POSSIBILITY OF PLACING 6 COMBAT MODIFIED CH-3C'S IN SEA INSTEAD OF 12 MODIFIED HH-43B'S, AND
2. TO WHAT EXTENT COULD THE CH-3C AIRCRAFT REPLACE THE HU-16'S?

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AT THIS MEETING IT WAS GENERALLY CONCLUDED THAT:

1. THE ALL-WEATHER CH-3C COULD REPLACE AND IMPROVE ON THE HU-16 AIRCRAFT'S CAPABILITY IN THOSE ITEMS THAT ARE PECULIAR TO THE HU-16, SUCH AS WATER RECOVERY.
2. THAT THE CH-3C CAN OBTAIN A 3-MINUTE ALERT POSITION.
3. THAT THE FIRE SUPPRESSION CAPABILITY OF THE CH-3C IS SIMILAR BUT GREATER THAN THAT OF THE HH-43B.
4. THAT THE HH-3C CAN PERFORM NIGHT, OVER-WATER RESCUE/RECOVERIES TRANSITING IFR WEATHER AND
5. THAT EVERY EFFORT SHOULD BE MADE TO PUT 6 CH-3C AIRCRAFT INTO SEA INSTEAD OF 12 ADDITIONAL HH-43B'S, AND THAT ADDITIONAL CH-3C'S BE SENT TO SEA AND REPLACE THE REMAINING HH-43B'S AND HU-16'S.

THIS IS OUR RECOMMENDED FORCE POSTURE. WE BELIEVE IT CAN BECOME A REALITY WITH A TIME-PHASED SERIES OF PROGRAMMED ACTIONS GEARED TO PLACE OPERATIONALLY READY SAR FORCES IN THE VIETNAM/ THAILAND COMPLEX BEGINNING IN FY 2/66 AND ACHIEVING THE END POSTURE OF A SOUTHEAST ASIA SQUADRON WITH 4 DETS OF 4 UE HH-3C'S EACH IN FY 4/66.

WE SUGGEST THAT 6 CH-3C'S FROM THE CURTAILED "SOUTH SHORE" TESTS COULD BE COMBAT MODIFIED BY JULY OF THIS YEAR. ATTENDANT RESOURCES, INCLUDING TRAINED PERSONNEL, COULD ALSO BE MADE

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AVAILABLE FROM THE SAME SOURCE.

CONCURRENT WITH THIS PROPOSED PROGRAM, DET 3, PARC THE SEA CONTROL ELEMENT WOULD BE DISCONTINUED, AND THE COORDINATION CENTER FUNCTION ABSORBED AND CONTINUED IN THE SOUTHEAST ASIA SQUADRON. WE RECOMMEND THAT THE FIRST 3 MODIFIED HH-3C's BE PLACED AT BIEN HOA AND THE 2D THREE AT NAKHON PHANOM, AND THAT 10 ADDITIONAL MODIFIED HH-3C AIRCRAFT BE SENT TO SEA AS SOON AS POSSIBLE UNTIL A TOTAL OF 16 HH-3C HELICOPTERS ARE IN THE POSTURE NOTED ON THIS CHART. IN OUR OPINION THESE 16 AIRCRAFT HAVE THE CAPABILITY TO REPLACE THE COVERAGE NOW BEING PROVIDED BY THE HH-43'S AND THE HU-16'S. UNTIL PACAF HAS TIME TO COMPLETELY ACQUAINT THEMSELVES WITH THE CAPABILITIES OF THE HH-3C THEY MAY REQUIRE ONE OR TWO HU-16'S BE RETAINED IN THE SEA COMPLEX. WE BELIEVE, HOWEVER, THAT FOLLOWING A BREAKING-IN PERIOD, THE HU-16'S CAN RETIRE TO CLARK AND NAHA AIR BASES. IF ONE OR TWO HU-16'S ARE REQUIRED ON A CONTINUING BASIS, THE AIRCRAFT AND CREWS SHOULD BE TDY'D FROM THE HU-16 FLEET IN THE PACIFIC.

WE ESTIMATE THE ATTRITION RATE FOR THESE TWIN-TURBINE AIRCRAFT TO BE 25% OF THE RECOMMENDED FORCE COMPUTED OVER A 12-MONTH PERIOD IN THE COMBAT ENVIRONMENT. THUS, 4 COMBAT CONFIGURED HH-3C AIRCRAFT PER YEAR MUST BE PROGRAMMED AS REPLACEMENT FOR THOSE ATTRITED. THIS ATTRITION FACTOR IS ALMOST 50% LESS THAN THAT

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COMPUTED FOR THE COMBAT MODIFIED SINGLE-ENGINE HH-43F'S.

CHART #8A - OVERLAY

THIS UE FORCE OF 16 HH-3C AIRCRAFT WILL REQUIRE 192 ADDITIVE
MANPOWER SPACES (OR APPROXIMATELY 20 LBR IF WE PROVIDE THE SPACES)
THIS TO INCLUDE THE SEA SQUADRON REQUIREMENT.

CHART #9 - ON (RADIUS OF HH-43)
(VFR RADIUS - TALK)

CHART #9 - OVERLAY - ON (HH-43B)

THIS INDICATES THE IFR RADIUS OF ACTION OF THE HH-3C WITH 2
AUXILIARY TANKS. FLYING TIME TO 400 MILES OUT IS 3 + 40 HRS. WITHIN
ANY PART OF RVN THIS AIRCRAFT FROM ITS HOME BASE SHOULD BE ABLE
TO BE OVER A LAND RECOVERY AREA WITHIN AN HOUR OR LESS. FORWARD
STAGING OR PREPLANNED STRIP ALERT WILL CUT THIS TIME. FOR EXAMPLE:
DEPLOYING FROM OUR PROPOSED FIXED BASE AT TAKHLI, ONE HH-3C CAN
GIVE ON THE SPOT, 3 MINUTES OR LESS AIRBORNE FIRE SUPPRESSION RESCUE
SERVICE AT KORAT. ONE ADVANTAGE OF THE HH-3C AND ITS DEPLOYMENT
TO ADVANCED OPERATING LOCATIONS SUCH AS CAN THO OR PLEIKU, IS
THAT ON THE SPOT RESCUE COVERAGE IS AVAILABLE WITHOUT UNDULY
JEOPARDIZING THE MAIN RESCUE FORCE BECAUSE OF THE POOR AIRFIELD
SECURITY AT MOST ADVANCED BASES SUCH AS PLEIKU.

CHART #10 - ON (COMMAND ARRANGEMENT)

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THIS WIRING DIAGRAM SHOWS OUR RECOMMENDED COMMAND ARRANGEMENT. ONE SEA SQUADRON WOULD PROVIDE THE USAF CONTROL ELEMENT FOR THE JSARC. THE SQUADRON COMMANDER WOULD REPORT TO THE PACIFIC AIR RESCUE CENTER (OR PACIFIC WING COMMANDER).

CHART #11 - ON (MOD COSTS)

THE COST TO MODIFY THE HH-43B TO A COMBAT CONFIGURED "F" MODEL IS \$225,000 PER AIRFRAME. TO MODIFY THE CH-3C'S TO THE HH-3C COMBAT CONFIGURATION IS \$150,000 PER AIRFRAME FOR THE FIRST 6 AND \$35,000 THEREAFTER.

CHART #12 - ON

FROM A MANPOWER VIEWPOINT THE ARS PROPOSAL WILL PROVIDE THE NECESSARY SAR FORCE AT A CHEAPER COST. THESE MANPOWER FIGURES ON THIS CHART ARE ADDITIVE TO THOSE 86 NOW AUTHORIZED.

AT THIS TIME, I WOULD LIKE TO SHOW YOU A 4-MINUTE FILM OF THE CH-3C FIRE SUPPRESSION TEST AND THEN I WILL CONCLUDE WITH SOME COSTS FACTORS.

BACKGROUND MATERIAL FOR NARRATION ON FOOTAGE OF THE HH-3C
FIRE SUPPRESSION TEST

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THIS IS THE NEW CH-3C SIKORSKY TWIN-TURBINE HELICOPTER NOW BEING USED IN LIMITED NUMBERS WITH THE AIR RESCUE SERVICE AT PATRICK AFB, FLA.

THE AIR RESCUE SERVICE WAS MADE RESPONSIBLE FOR CATEGORY III TESTING OF THIS NEW HELICOPTER, AND ONE PORTION OF THE TEST PROGRAM WAS TO INVESTIGATE THE FIRE SUPPRESSION POTENTIAL.

HERE TWO FIREFIGHTERS DEPLOY FROM THE '3C AND, AIDED BY THE HELICOPTER'S HIGH VELOCITY ROTOR DOWNWASH, USE THE FIRE SUPPRESSION KIT TO LAY A PATH OF FOAM TO THEIR OBJECTIVE - A MOCK-UP COCKPIT OF A CRASHED AIRCRAFT. THE EFFECT OF THE ROTOR-WASH IS CLEARLY VISIBLE IN THESE SCENES.

THESE MOTION PICTURES ARE FROM THE FIRST TESTS OF THE CH-3C IN THIS ROLE. THE TESTS WERE CONDUCTED UNDER A PRACTICALLY "NO WIND" CONDITION WHICH CONSIDERABLY LESSENS THE EFFECT OF THE ROTOR DOWNWASH. EVEN IN THIS SOMEWHAT ADVERSE CONDITION, THE FIREFIGHTERS INVOLVED IN THE TEST AGREED THAT THE NON-DIRECTIONAL NATURE OF THE CH-3C DOWNWASH WAS A GREAT BOON IN THAT IT AFFORDED THEM CONSTANT PROTECTION EVEN WHEN THE HELICOPTER WAS MANEUVERING BEHIND THEM.

THIS SCENE SHOWS THE HH-43B HELICOPTER FIGHTING A COMPARABLE FIRE UNDER IDENTICAL CIRCUMSTANCES.

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CHART #13 - ON

THE MOST COMPELLING RATIONALE IN OUR RECOMMENDED SEA SAR FORCE POSTURE IS THAT IT WOULD ACHIEVE THE FOLLOWING RESULTS:

- a. REDUCE THE ADDITIVE MANPOWER EXPENDITURE IN THE PACAF PROPOSAL BY 178 SPACES.
- b. REDUCE THE COST IN AIRFRAMES FROM 30 TO 16.
- c. REDUCE SUBSTANTIALLY THE AIRFRAME MODIFICATION COSTS. 1.2 MILLION VS 2.7 MILLION.
- d. ELIMINATE THE TDY LBR FORCES AND ELIMINATE OR GREATLY REDUCE THE HU-16 ROTATIONAL REQUIREMENT.
- e. IMPROVE LOGISTICS BY REDUCING THE NUMBER OF AIRCRAFT TYPES AND NUMBERS, AND FIXED-WING INSTALLATIONS. 5 OPERATING BASES IN ARS PROPOSAL VS 8 IN PACAF'S. ONE AIRCRAFT TYPE IN THE ARS PROPOSAL VS 4 IN PACAF'S.
- f. RESTORE BACK TO NORMAL THE LBR FORCES.
- g. IMPROVE OUR HIGH ALTITUDE OPERATING CAPABILITY AT CRITICAL LOCATIONS SUCH AS NELLIS, DAVIS-MONTHAN, etc, PROVIDING (since we can utilize the F's at these locations) A GREATER SAFETY FACTOR.
- h. A SUPERIOR OPERATIONAL CAPABILITY AT OVERALL REDUCED COSTS.

WE RECOMMEND THAT HQ USAF BE REQUESTED TO PROCEED FORWARD WITH IMPLEMENTING THE 16 HH-3C HELICOPTER CONCEPT FOR SEA.

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THIS TO INCLUDE 192 ADDED MANPOWER SPACES FOR AN "ALL PCS
OPERATION. "

Cost HH-43B	\$467,000
<u>Modification</u>	<u>225,000</u>
	\$692,000
Cost CH-3C	\$860,000
<u>Modification</u>	<u>150,000</u>
1st 6	\$1,010,000
Next each	\$860,000
	<u>35,000</u>
	\$895,000

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