A-3

SUNSET PLAN

NAVAIRSYSCOM DET WSM ALAMEDA

19 October 1988

A-3 SUNSET PLAN

"The A-3 aircraft has had an exceptional history, and its success is best reflected by its unprecedented years of service and numerous missions it has supported. However, it has become increasingly more difficult and expensive to maintain, and long overdue is the passing of its missions to less mature, more cost effective, fleet supportable platforms....."

COMNAVAIRLANT Norfolk VA 220407Z Feb 88

As succinctly stated by CNAL, the A-3 aircraft is in its twilight years. Various A-3 T/M/S platforms are scheduled for phasedown/phaseout during the 1990's. The high costs associated with maintaining the A-3 flying safely while continuing to accomplish assigned missions necessitate a carefully structured sunset plan.

The intent of this document is to provide a current, "best guess", snapshot as to the status and projected major milestones for each active A-3 BUNO. This A-3 Sunset Plan will be updated as required so as to provide all concerned a relevant planning basis. The cost of modification installations, SDLM, upgrade of trainers, etc., must be carefully weighed against the "return on investment" given current budget constraints.

There are currently (Oct 88) a total of 38 active A-3 aircraft — 31 "Version" airframes and 7 "Basic" airframes. The 38 aircraft encompass nine distinct T/M/S. Enclosure (1) provides a breakdown of the A-3 fleet composition. Although there are 38 active A-3 aircraft, the "near term" fleet composition noted in enclosure (1) gives a more accurate inventory accounting. One EA aircraft has been "parked" due to lack of SDLM funding; one ERA is undergoing extensive repair due to a Class B mishap.

As the various A-3 T/M/S approach retirement, different factors are driving the exact timing and specific details associated with each individual BUNO's retirement decision. In some cases, aircraft retirement is being driven by structural life limit (SLL). In other cases, retirement will be due to obsolescence as replacement platforms are phased in.

As noted, scarcity of SDLM (O&MN) funding is now providing another impetus for removal of aircraft from active service and is occurring as SDLM costs for this thirty year old airframe continue to rise. Enclosure (2) depicts a history of SDLM man-hours expended and projected SDLM man-hours for the A-3 aircraft; enclosure (3) provides analogous data for SDLM material dollar costs.

For informational purposes, enclosures (4) through (10) provide the current projected end of service life due to SLL for those T/M/S (EA, KA,

ERA, TA & UA) for which SLL could be a constraint. SLL for "Version" aircraft is 14,000 flight hours without AFC-508. Installation of AFC-508 increases the "Version" SLL to 18,000 flight hours; this is sufficient service life to satisfy known mission requirements. SLL for the "Basic" aircraft is 10,000 flight hours or as specified by COMNAVAIRSYSCOM Washington DC 181536Z May 88 and as graphically depicted on enclosure (6). The uniquely specified SLL's for the four Reserve KA-3B's still flying provide sufficient service life for these airframes to satisfy plans for decommissioning of the remaining Reserve VAK squadron.

By T/M/S community, the status and projected operational/service life of each airframe follows and is graphically depicted in enclosures (11) through (16). Note that ASPA impacts have been ignored but will be incorporated into updates to the A-3 Sunset Plan when a successful ASPA inspection occurs. It should also be noted that adjustments to PED's occur as non-aging time is experienced. Non-aging time adds 25-35% to the absolute time associated with each Operational Service Period (OSP). Hence, the "Active" periods shown will require adjustments "to the right" over time. Enclosure (17), the quarterly A-3 Configuration/Service Life Matrix, has also been included as a ready source for relevant planning information.

EA-3B

The EA-3B aircraft are ELINT platforms forward deployed with VQ-1 and VQ-2. These aircraft are required until replaced by the ES-3A in FY-91/92. As indicated by enclosure (1), 12 EA-3B's currently exist. The "near term" number of EA-3B's is 11 due to the parking of BUNO 146459. Enclosure (11) provides a community picture given current/near term SDLM completions and the present two-year Operational Service Period (OSP). The current ES-3A schedule will require a minimum of four EA-3B's through mid CY-92. Enclosure (12) provides an EA-3B status if a three-year OSP (a current proposal in work) is assumed. A three-year OSP may be feasible due to the non carrier environment in which these aircraft are currently operating. All other A-3 T/M/S currently have a three-year OSP. As is evident by enclosures (11) and (12), ***it is possible, assuming that non-aging time accumulates at the previously experienced rates (25-35%), that no future SDLM's of EA-3B aircraft other than those shown would be needed, given a high rate of successful ASPA inspections, with the current two-year OSP or given a three-year OSP.*** The current budget (May 88) indicates initial ES-3A aircraft deliveries in FY-91/92. ***If the ES-3A schedule slips, parked EA-3B aircraft will need to be identified for SDLM induction if both VQ-1 and VQ-2 remain active until ES-3A IOC.***

KA-3B/NA-3B

The KA-3B aircraft provide tanker support for the Reserves (VAK-208) and for FEWSG (VAQ-33 and VAQ-34). The NA-3B is flown by NWC, China Lake, as a RDT&E testbed.

As noted previously, the Reserve KA-3B's are SLL limited (COMNAVAIRSYSCOM Washington DC 181536Z May 88) and will no longer be inducted for SDLM. Enclosure (13) includes the phaseout plan for the Reserve KA-3B's. ***If VAK-208 is decommissioned in FY-89 as currently anticipated, the currently specified SLL will support the Reserve operational requirements.***

Also shown is a current "best guess" for the remaining "Basic" airframes – the NWC NA-3B RDT&E aircraft BUNO 142630 and the two FEWSG KA-3B BUNO's 142650 and 138944. Future SDLM's for these aircraft are not anticipated, and retirement should occur when successful ASPA inspections are not possible.

ERA-3B

The ERA-3B aircraft provide ECM training for fleet air and surface units as part of the FEWSG "Orange Force." The aircraft are flown by VAQ-33 and VAQ-34. Although seven active aircraft remain, BUNO 144841 is undergoing an extensive repair effort following a Class "B" mishap. BUNO 144838 was recently inducted for SDLM following transfer from VAQ-34 to VAQ-33.

A proposal to replace the ERA's commencing in FY-90 with a lease/buy aircraft has strong support within OPNAV (and NAVAIR), but funding has not been identified. If a replacement aircraft is obtained, present and near term (1 CNAL FY-88 and 1 CNAL FY-89) SDLM's would provide a community with marginal capability through mid CY-91. ***If the replacement aircraft does not "sell" and SDLM funding is not quickly identified, the ERA community will be essentially nonexistent by CY-91 as is depicted by enclosure (14).***

TA-3B/UA-3B

The TA-3B's are assigned to the VAQ-33 Fleet Replacement Squadron (FRS) Component as "Version" trainer aircraft. A modified RA-3B, the UA-3B BUNO 144834, is assigned to VQ-2 as a proficiency aircraft. The decreasing requirement for TA-3B's will parallel the reduction in the overall A-3 fleet. It is anticipated that if ERA-3B's remain in service in the outyears, then a minimum of three TA-3B's will be required. The VAQ-33 A-3 FRS component could stand down, and VAQ-33 (FEWSG) and VAQ-34 could each retain a TA-3B for organic training with one pipeline asset. A more realistic approach would perhaps be to transfer all ERA assets to VAQ-33 and maintain the TA-3B's single sited. ***One TA-3B SDLM per year will thus be required in the outyears as long as ERA-3B's remain in the inventory.*** In this regard, TA-3B 144858 was recently inducted for SDLM. The UA-3B could join the TA-3B pool as the VQ-2 EA-3B's are retired. Enclosure (15) provides a community "snapshot".

NRA-3B/NTA-3B/RA-3B

Two NRA-3B aircraft are flown by PMTC as RDT&E testbeds. One NRA-3B is flown by the USAF; one RA-3B is flown by the U. S. Army. The NTA-3B is bailed to Grumman and flown by Hughes in support of F-14 development. These aircrafts' retirements will be predicated upon usage as driven by RDT&E funding. The PMTC aircraft are candidates for retirement upon failure of ASPA. The USAF NRA-3B and the Hughes NTA-3B appear to be required into the mid/late 1990's. The Army RA-3B will probably be retired in the early 1990's. Supply support for the A-3 RDT&E platforms should improve when the EA-3B's start retiring. Enclosure (16) provides a graphic picture for these aircraft.

Summary

The OPNAV Aircraft Program Data File (APDF) specifies planned operational force levels for particular weapon systems. The NAVAIR Weapon System Planning Document (WSPD) provides more precise information for implementing the program objectives of the APDF. While the WSPD does provide force level breakout by TYCOM, it does not, in general, attempt to manage the phasedown/phaseout of an aircraft weapons system by discrete BUNO. In addition, the update of the WSPD on an annual basis limits its effectiveness as a relevant, day-to-day, planning tool for optimally retiring an aircraft type. The current funding constraints necessitate that logistical, modification, SDLM, parking, striking, etc. decisions be made only after a close consideration of the mission and cost tradeoffs. This A-3 Sunset Plan is intended to provide the diverse decision makers, who actually determine the specifics of a phasedown/phaseout, a clear, concise, and current planning document.

NAVAIR

A-3 FLEET COMPOSITION

A-3 WSM

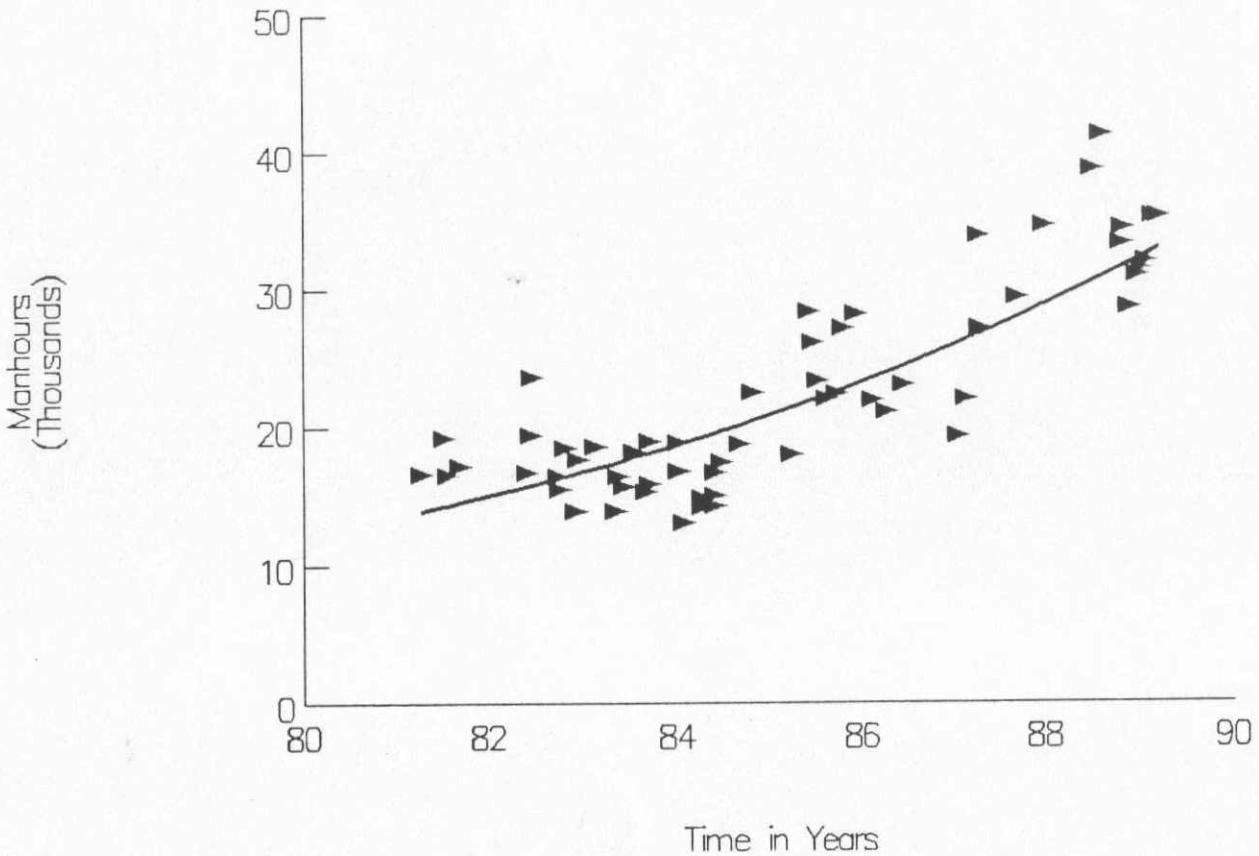
		MAR 87	OCT 88	NEAR TERM
	"VERSION" AIRCRAFT			
*	EA-3B ELINT PLATFORMS	12	12	11
*	TA-3B TRAINING & LOGISTICS	7	6	6
*	ERA-3B FEWSG TRAINING MISSION	8	7	6
*	RA/NRA/NTA-3B RDT&E MISSION	7	5	5
*	UA-3B FLEET TRAINER	1	1	1
		35	31	29
	"BASIC" AIRCRAFT			
*	KA-3B RESERVE TANKERS	10	4	4
*	KA-3B FEWSG TANKERS	3	2	2
*	NA-3B RDT&E ASSETS	2	1	1
		15	7	7
	TOTAL	50	38	36

Encl (1)

A-3 SDLM
ACTUAL MANHOURS EXPENDED

NAVAIR

A-3 WSM

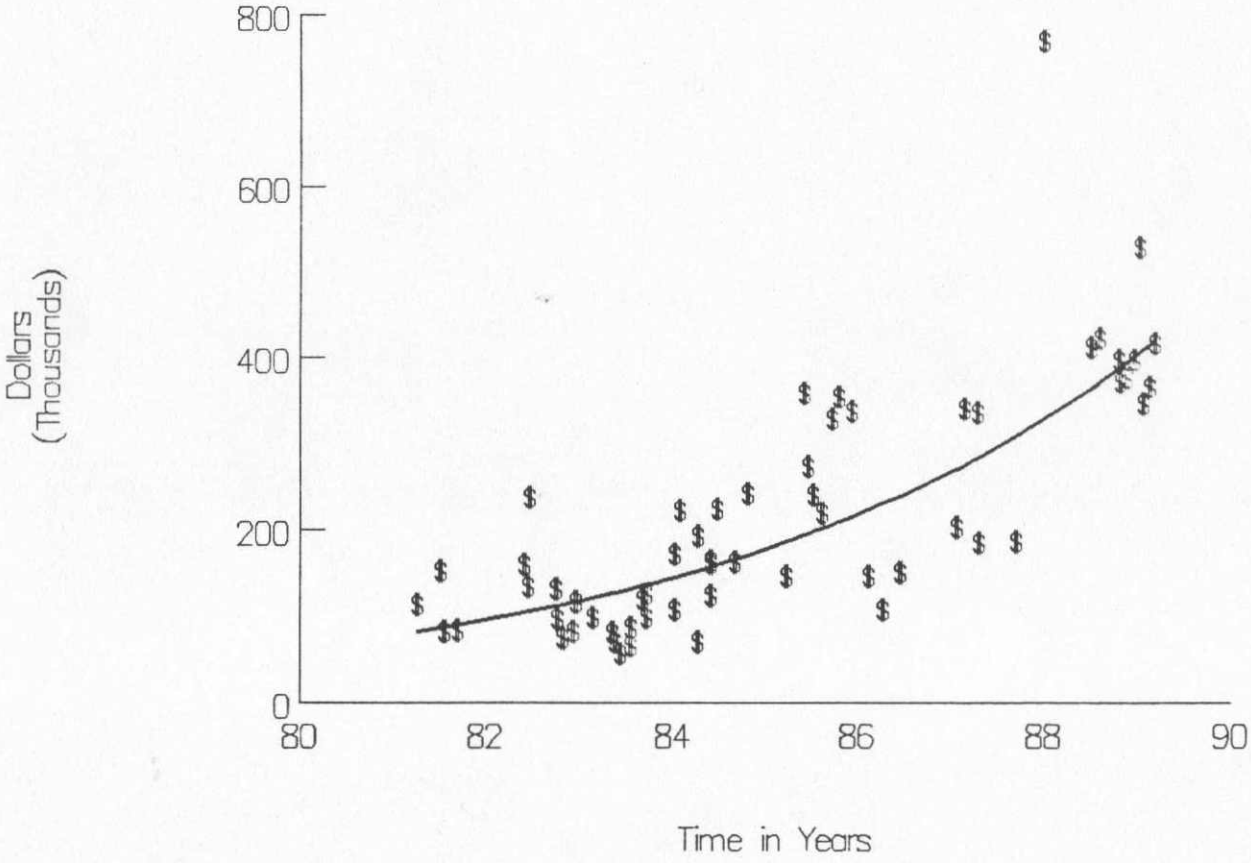


Encl (2)

19 October 1988

A-3 SDLM
MATERIAL DOLLARS EXPENDED

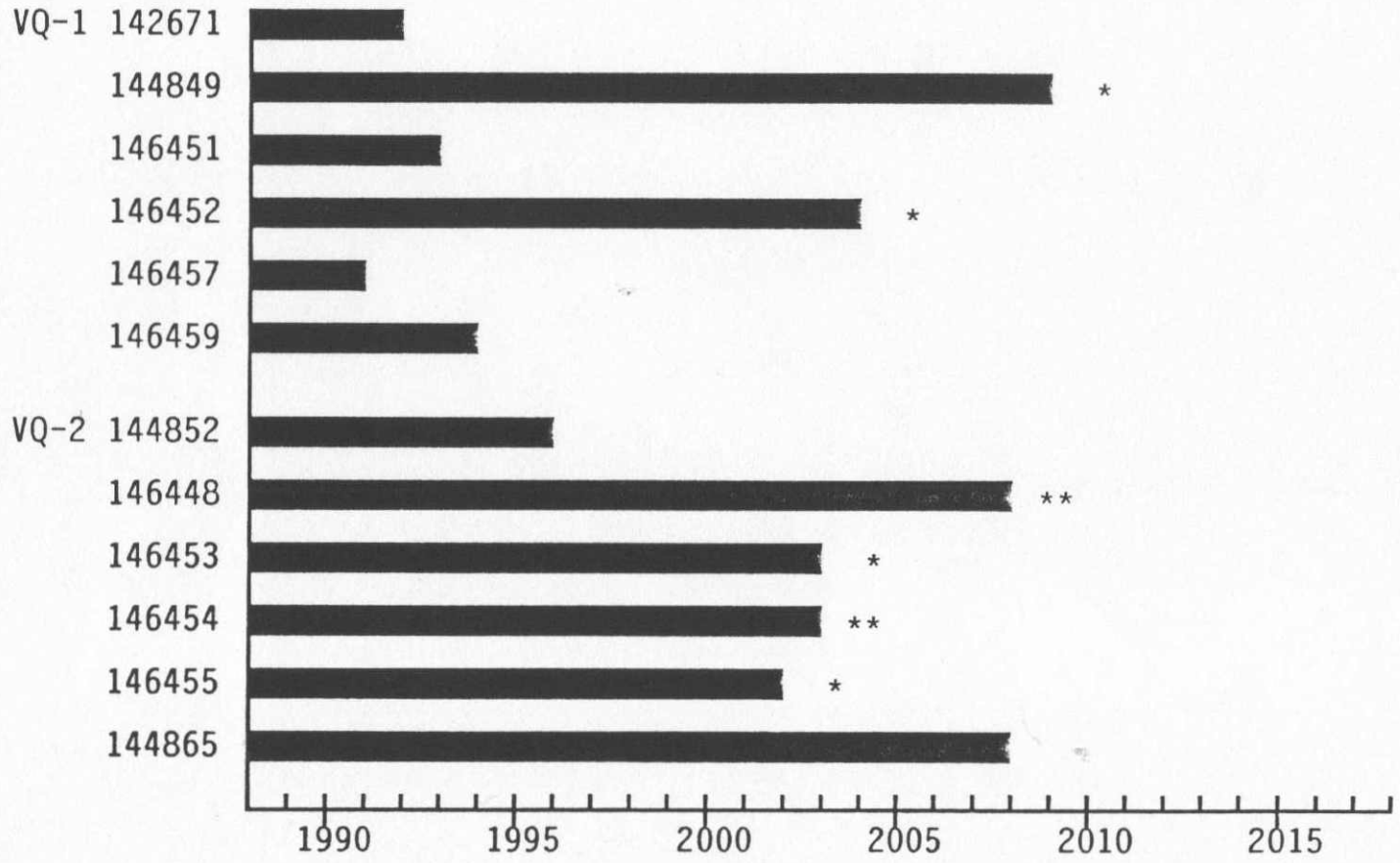
A-3 WSM



Encl (3)

EA-3B
END OF SERVICE LIFE
14,000 FLIGHT HOURS

A-3 WSM

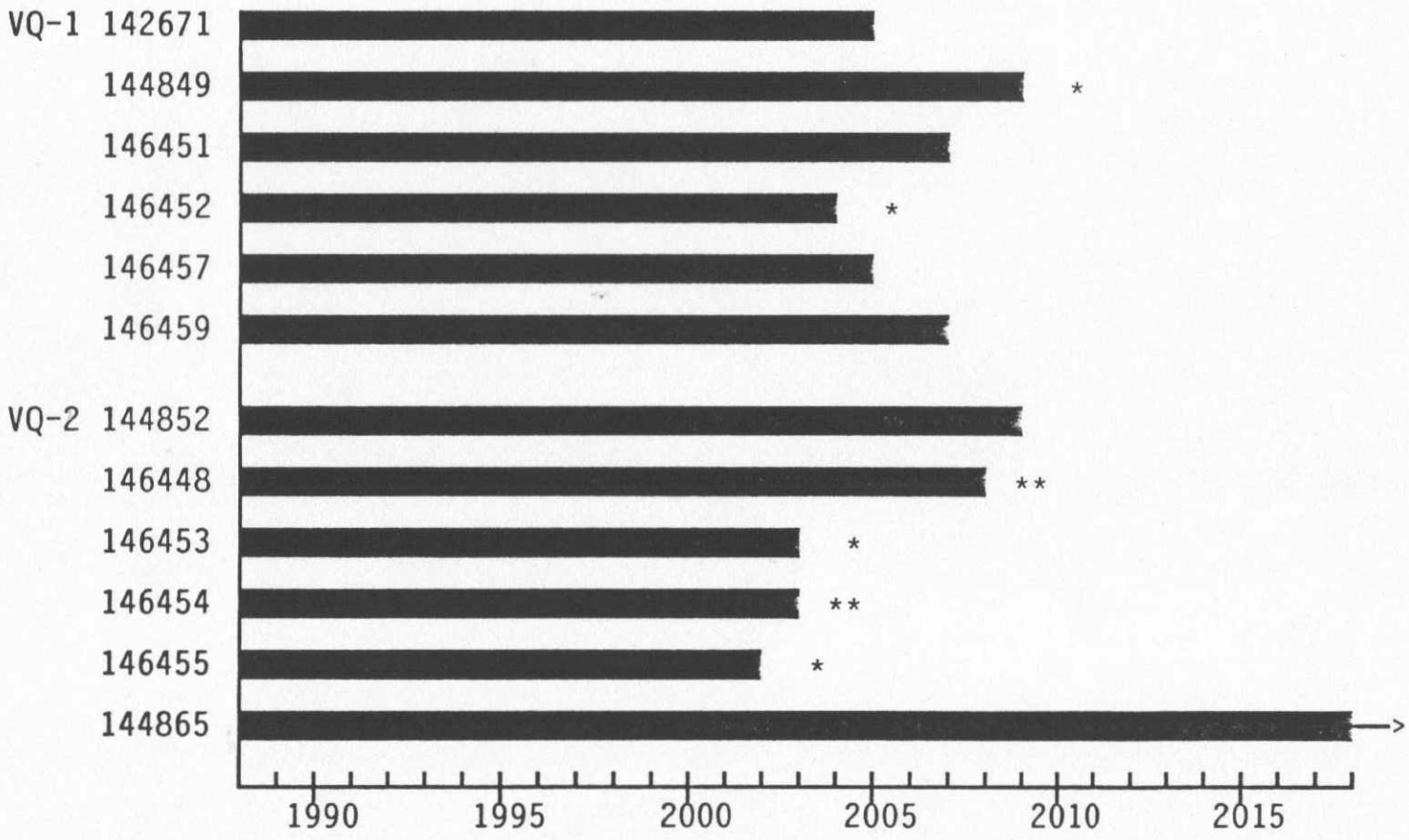


PROJECTIONS ARE BASED ON A USAGE RATE OF 300 FLIGHT HRS/YR
* AFC-508 HAS BEEN INCORPORATED; ** AFC-508 INCORPORATION IN WORK. SLL 18,000 FLIGHT HOURS.

Encl (4)

EA-3B
END OF SERVICE LIFE
18,000 FLT HRS WITH AFC-508

A-3 WSM



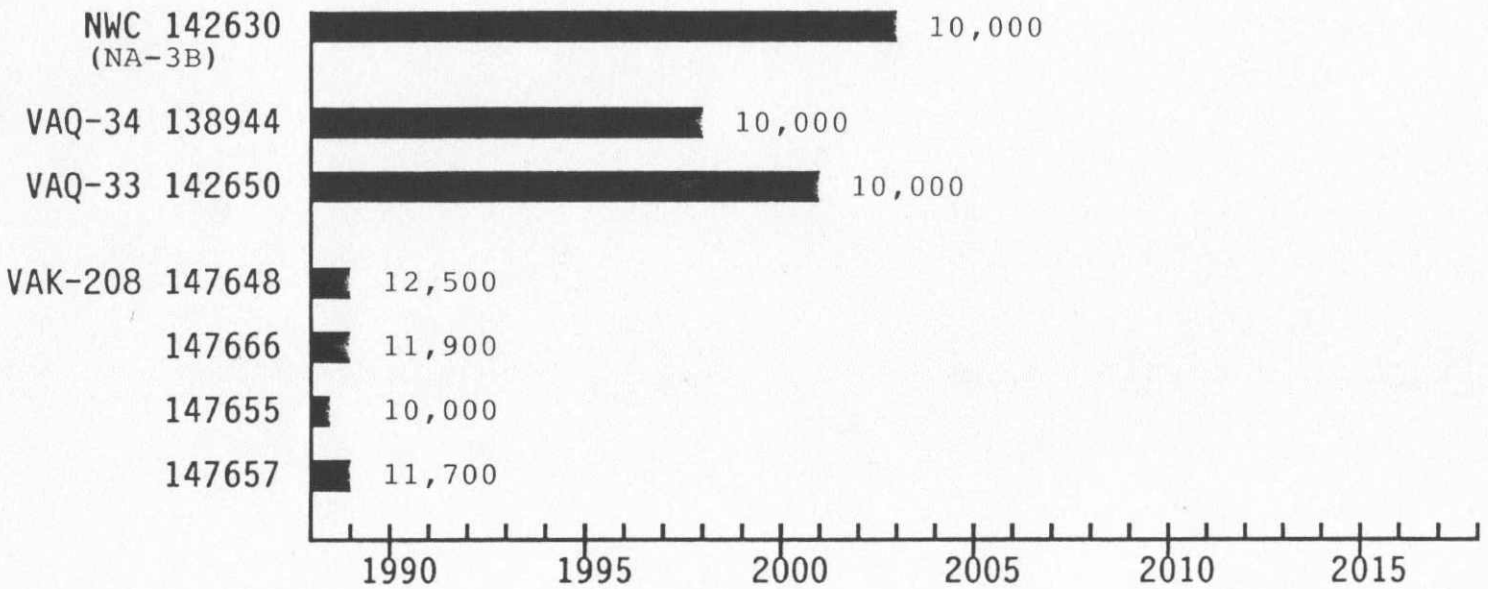
PROJECTIONS ARE BASED ON A USAGE RATE OF 300 FLIGHT HRS/YR.
* AFC-508 HAS BEEN INCORPORATED; ** AFC-508 INCORPORATION IN WORK

Encl (5)

KA-3B AND NA-3B
END OF SERVICE LIFE*

NAVAIR

A-3
WSM

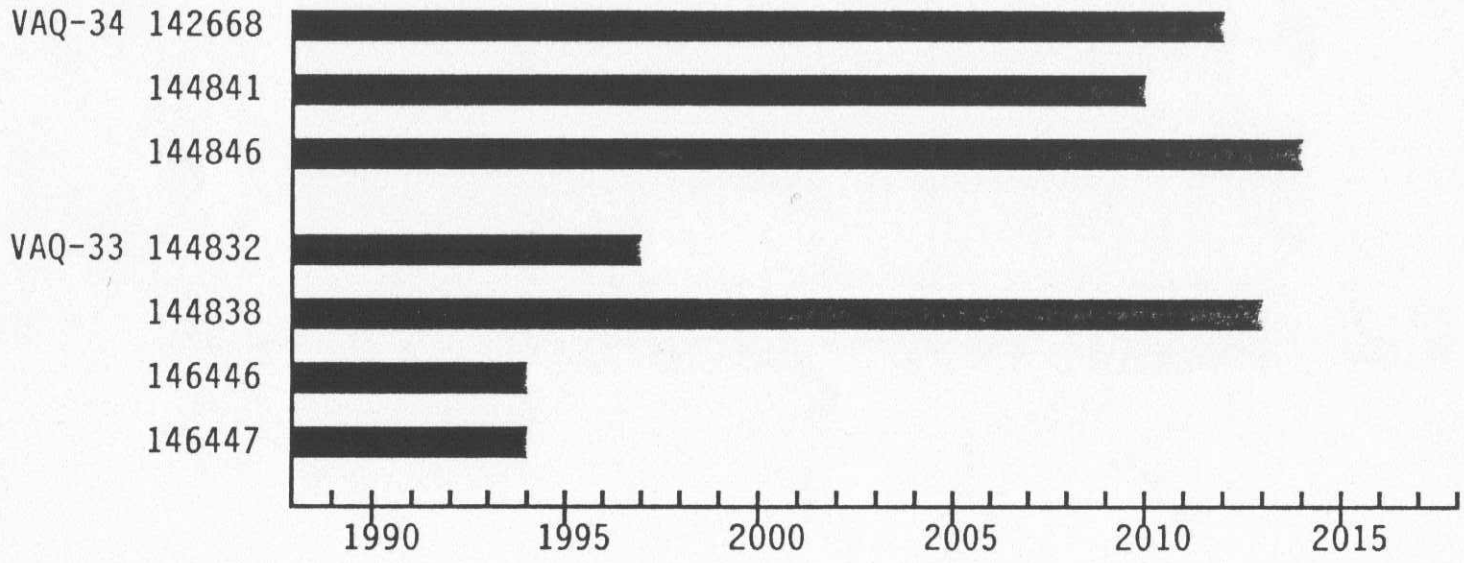


PROJECTIONS ARE BASED ON A USAGE RATE OF 310 FLIGHT HRS/YR
* COMNAVAIRSYSCOM WASHINGTON D. C. 181536Z MAY 88

Encl (6)

ERA-3B
END OF SERVICE LIFE
14,000 FLIGHT HOURS

A-3
WSM

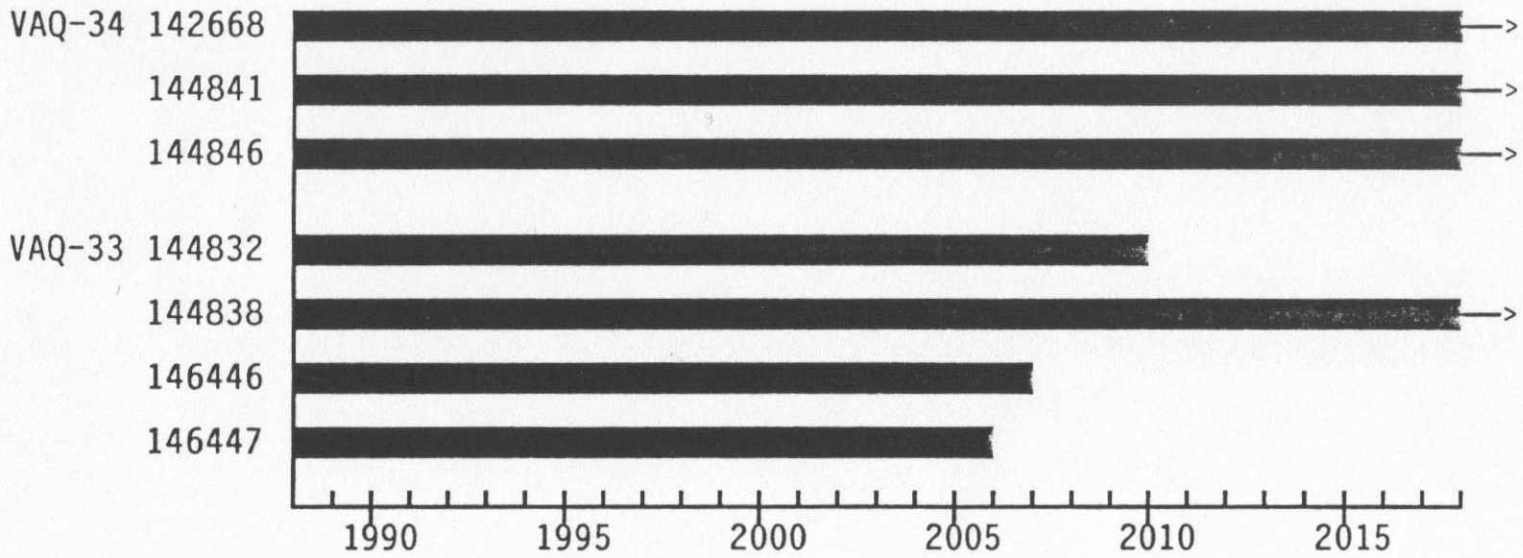


PROJECTIONS ARE BASED ON A USAGE RATE OF 320 FLIGHT HRS/YR.

Encl (7)

ERA-3B
END OF SERVICE LIFE
18,000 FLIGHT HOURS

A-3 WSM

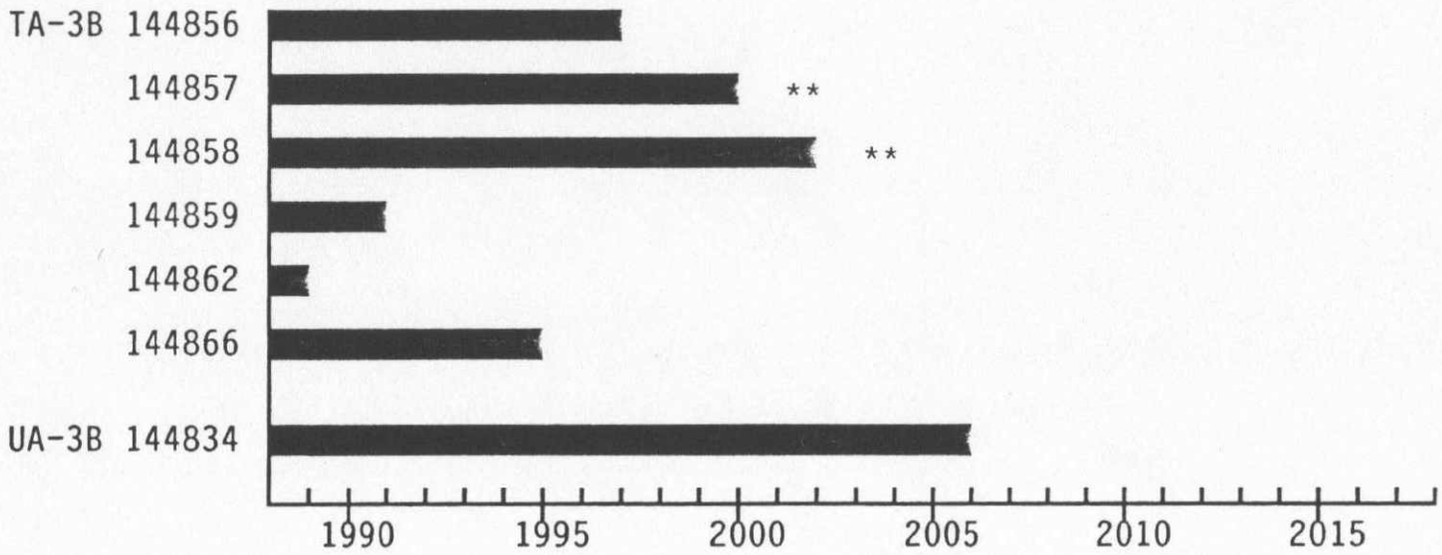


PROJECTIONS ARE BASED ON A USAGE RATE OF 320 FLIGHT HRS/YR.

Encl (8)

TA-3B AND UA-3B
END OF SERVICE LIFE
14,000 FLIGHT HOURS

A-3
WSM



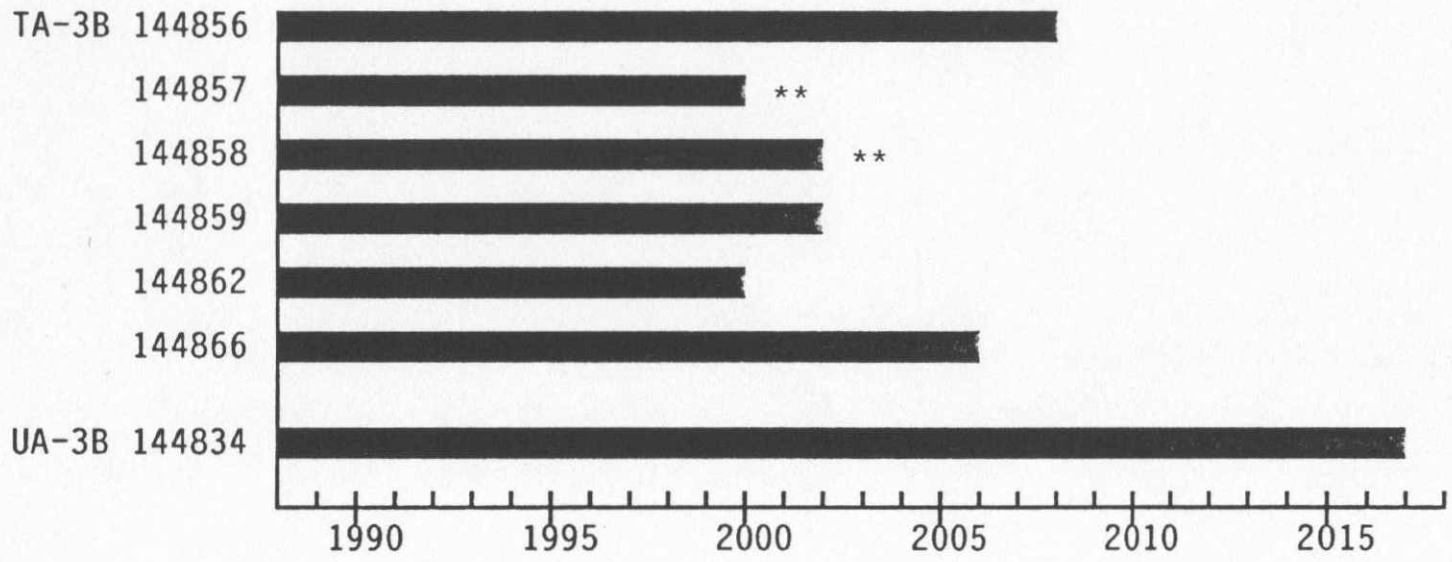
PROJECTIONS ARE BASED ON A USAGE RATE OF 350 FLIGHT HRS/YR
** AFC-508 INCORPORATION IN PLANNING

Encl (9)

TA-3B AND UA-3B
END OF SERVICE LIFE
18,000 FLIGHT HOURS

NAVAIR

A-3
WSM



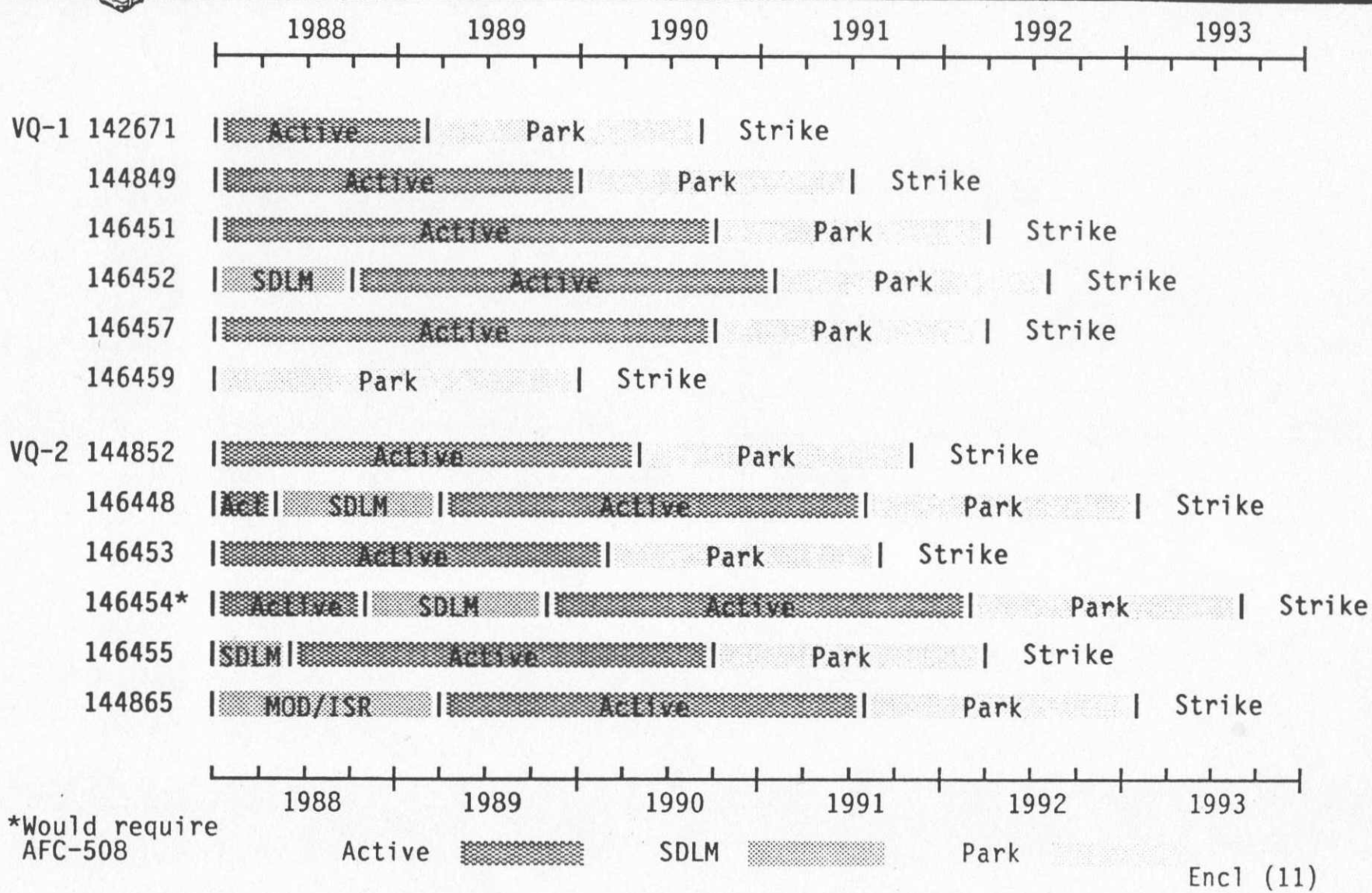
PROJECTIONS ARE BASED ON A USAGE RATE OF 350 FLIGHT HRS/YR
** AFC-508 INCORPORATION IN PLANNING

EA-3B END OF OPERATIONAL LIFE

2-YEAR OPERATIONAL SERVICE PERIOD

NAVAIR

A-3 WSM



*Would require AFC-508

Encl (11)

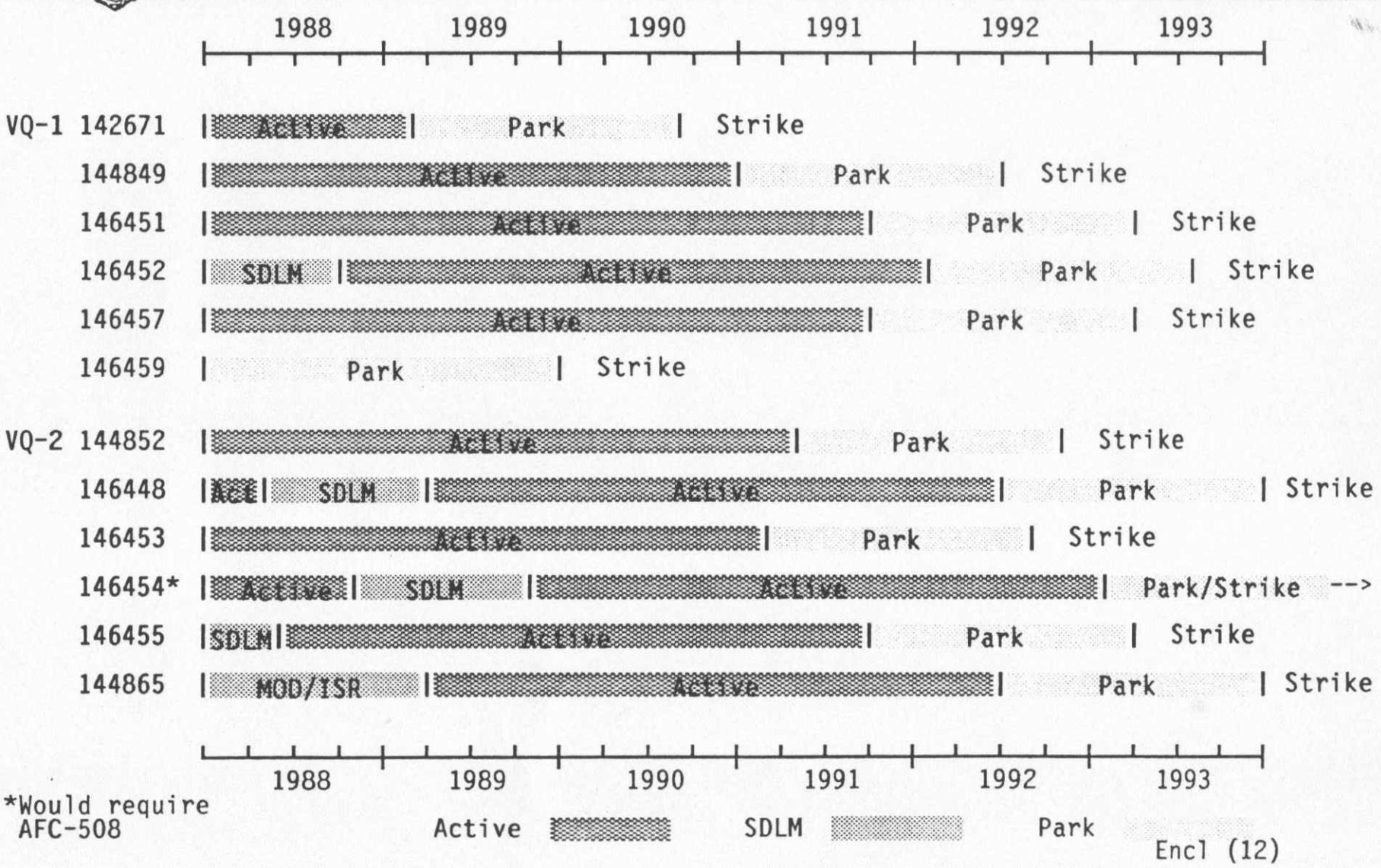
19 October 1988

EA-3B END OF OPERATIONAL LIFE

3-YEAR OPERATIONAL SERVICE PERIOD

NAVAIR

A-3 WSM



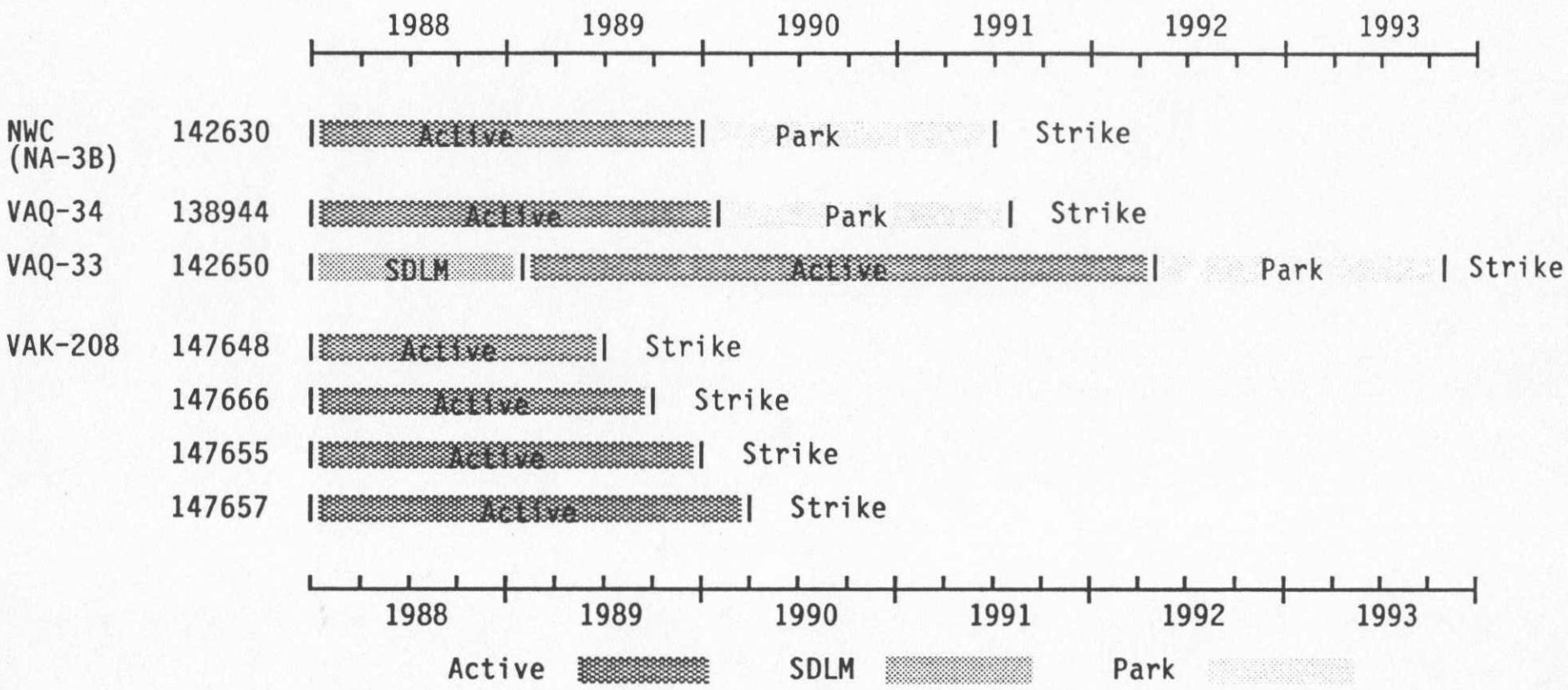
*Would require AFC-508

Encl (12)

19 October 1988

KA-3B AND NA-3B
END OF OPERATIONAL LIFE

A-3 WSM

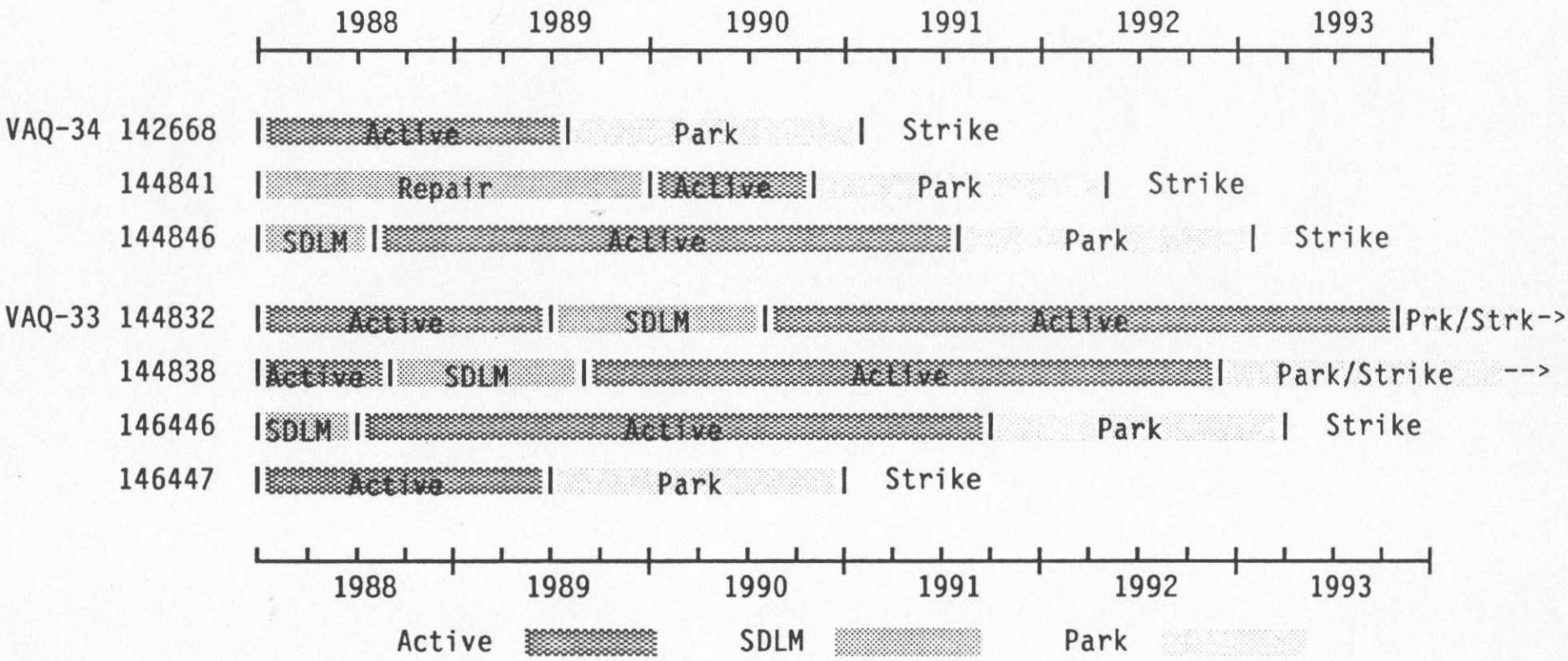


Encl (13)

19 October 1988

ERA-3B
END OF OPERATIONAL LIFE

A-3
WSM

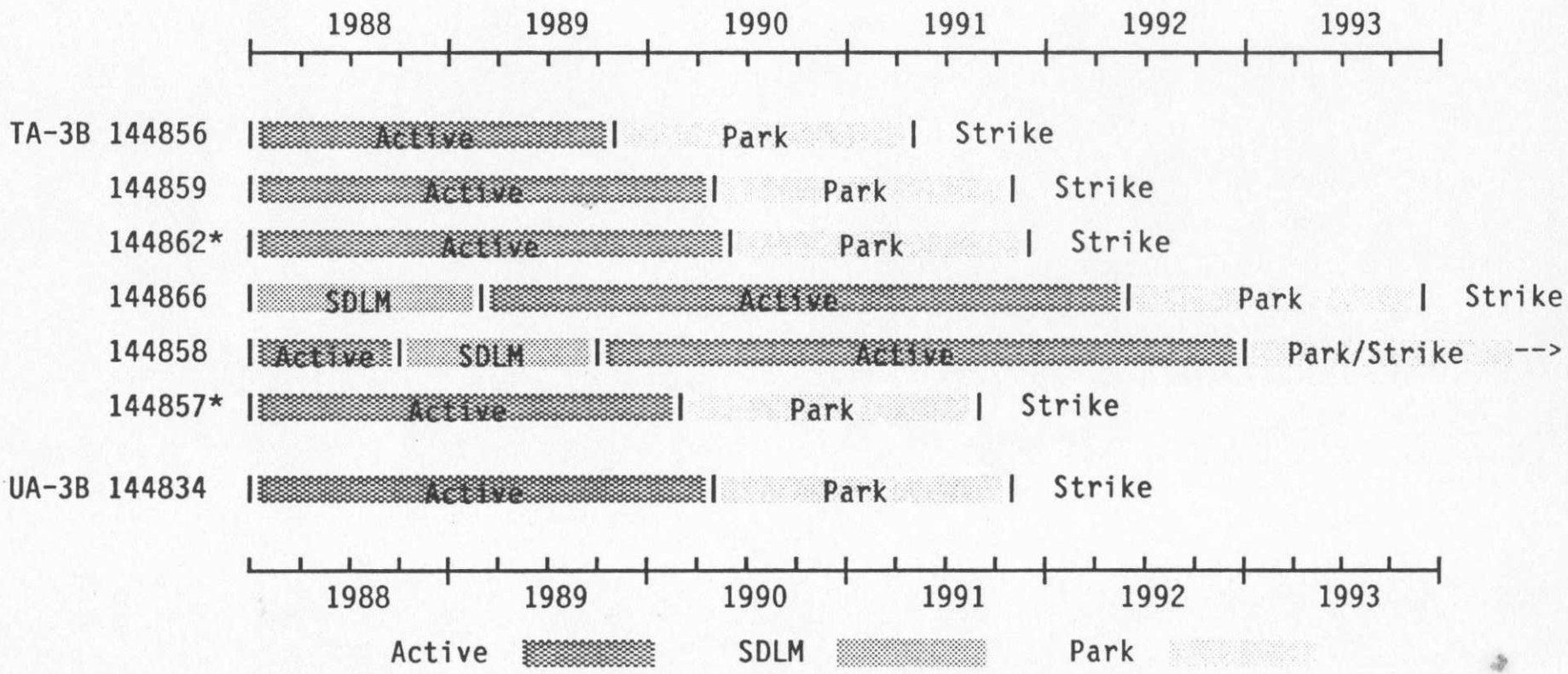


Encl (14)

TA-3B AND UA-3B
END OF OPERATIONAL LIFE

NAVAIR

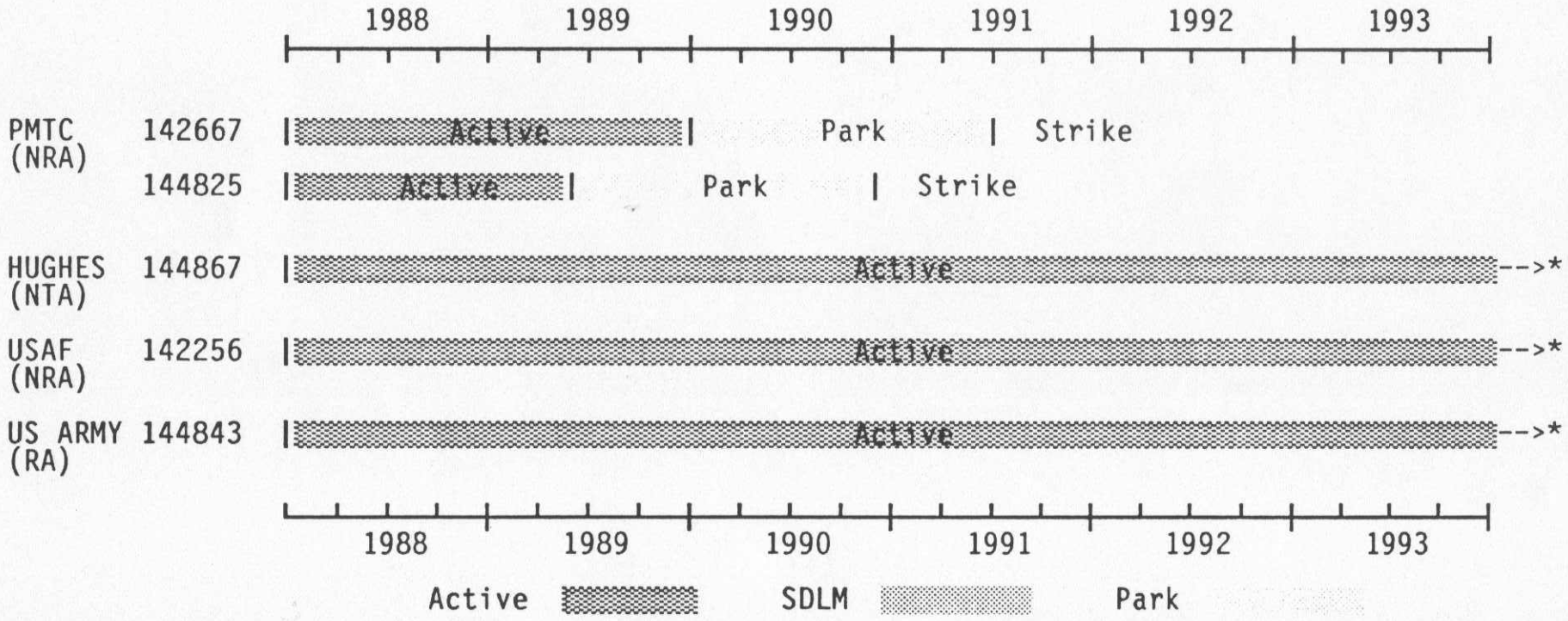
A-3 WSM



*Requires AFC-508 within approximately 75 hrs (144862), 125 hrs (144857)

NRA-3B/NTA-3B/RA-3B
END OF OPERATIONAL LIFE

A-3 WSM



* Retirement to be predicated on RDT&E requirements and funding.

A-3 CONFIGURATION/SERVICE LIFE MATRIX - REVISION DATE 10/19/88

TMS	BUNO	FH	FH 12 MO	CATS	CATS 12 MO	ARR	ARR 12 MO	AS OF	PED	AFC:	455	489	496	508	509	511	513	516	517	520	521	522
EA-3B	144852	11723	235	698	0	754	0	10/88	01/90		R	C	C	R	C	NA	C	R	C	R	R	R
EA-3B	146448	12048	121	1436	4	1464	6	10/88	SDLM		C	C	C	R	C	NA	C	R	R	R	R	R
EA-3B	146453	13658	465	1462	0	1565	3	10/88	11/89		C	C	C	C	C	NA	R	R	R	R	R	R
EA-3B	146454	13528	356	1566	0	1592	3	10/88	SDLM		C	C	C	R	C	NA	R	R	C	R	R	R
EA-3B	146455	13712	104	1895	0	1914	0	10/88	06/90		C	C	C	C	C	NA	R	R	R	R	R	R
EA-3B	144865	8115	0	0	0	1	0	10/88	05/91		R	C	C	R	C	NA	C	C	C	C	C	C
UA-3B	144834	7727	161	221	0	235	2	10/88	01/90		R	C	C	R	C	NA	C	C	R	R	NA	R
EA-3B	142671	12792	150	1194	14	1221	14	10/88	11/88		C	R	C	R	R	NA	R	R	R	R	R	R
EA-3B	144849	11725	465	1134	4	1180	5	10/88	09/89		C	C	C	C	C	NA	C	C	R	R	R	R
EA-3B	146451	12401	115	1108	0	1174	1	10/88	06/90		C	C	C	R	C	NA	C	C	C	R	R	R
EA-3B	146452	13226	0	791	0	821	0	10/88	10/90		C	C	C	C	C	NA	R	R	C	R	R	C
EA-3B	146457	13057	90	1039	0	1033	2	10/88	06/90		C	C	C	R	C	NA	C	C	R	R	R	R
EA-3B	146459	12353	21	1059	0	1109	0	10/88	F/S		R	C	C	R	R	NA	R	R	R	R	R	R
ERA-3B	142668	6341	157	0	0	11	0	10/88	04/89		NA	C	R	R	C	C	NA	C	NA	NA	NA	C
ERA-3B	144841	6924	75	0	0	125	0	10/88	ISR		NA	C	C	R	C	R	NA	R	NA	NA	NA	R
ERA-3B	144846	5780	44	0	0	67	0	10/88	07/91		NA	C	C	R	C	C	NA	C	NA	NA	NA	C
KA-3B	138944	6925	195	0	0	15	0	10/88	11/88		C	NA	C	NA	C	NA	NA	C	NA	NA	NA	C
ERA-3B	144832	11053	314	20	0	42	0	10/88	04/89		NA	R	R	R	C	C	NA	R	NA	NA	NA	R
ERA-3B	146446	12039	179	0	0	96	0	10/88	06/91		NA	C	C	R	C	C	NA	C	NA	NA	NA	C
ERA-3B	146447	12114	435	0	0	48	0	10/88	03/89		NA	R	C	R	C	C	NA	R	NA	NA	NA	R
ERA-3B	144838	6119	399	0	0	9	0	10/88	SDLM		NA	C	R	R	C	C	NA	C	NA	NA	NA	C
KA-3B	142650	5843	0	381	0	387	0	10/88	SDLM		C	NA	C	NA	C	NA	NA	R	NA	NA	NA	R
TA-3B	144856	10940	449	300	41	304	45	10/88	08/89		R	R	C	R	C	NA	C	C	C	R	R	R
TA-3B	144859	12939	290	455	29	458	30	10/88	01/90		R	C	C	R	C	NA	R	R	C	R	R	R
TA-3B	144862	13928	400	372	37	375	37	10/88	02/89		R	C	C	R	C	NA	R	R	C	R	R	R
TA-3B	144866	11605	0	626	0	625	0	10/88	SDLM		R	R	C	R	C	NA	C	R	R	R	R	R
TA-3B	144858	13132	168	452	18	451	20	10/88	SDLM		R	R	C	R	C	NA	R	R	C	R	R	R
TA-3B	144857	13854	101	0	0	0	0	10/88	11/89		R	C	C	R	C	NA	C	C	C	C	C	C
KA-3B	147648	12214	562	1064	0	1111	5	10/88	03/89		C	NA	C	NA	C	NA	NA	C	NA	NA	NA	C
KA-3B	147666	11628	506	1082	0	1135	0	10/88	06/89		C	NA	C	NA	C	NA	NA	C	NA	NA	NA	C
KA-3B	147655	9825	482	982	34	999	34	10/88	09/89		C	NA	C	NA	C	NA	NA	R	NA	NA	NA	R
KA-3B	147657	11413	611	1093	14	1140	17	10/88	12/89		C	NA	C	NA	C	NA	NA	C	NA	NA	NA	C
NRA-3B	142667	5047	37	0	0	1	0	10/88	09/89		NA	R	R	R	C	NA	NA	R	NA	NA	NA	R
NRA-3B	144825	4990	129	0	0	0	0	10/88	02/89		NA	R	R	R	C	NA	NA	R	NA	NA	NA	R
NA-3B	142630	5289	152	593	0	1334	0	10/88	09/88		C	NA	R	NA	R	NA	NA	C	NA	NA	NA	C

A-3 CONFIGURATION/SERVICE LIFE MATRIX - REVISION DATE 10/19/88

TMS	BUNO	FH	FH 12 MO	CATS	CATS 12 MO	ARR	ARR 12 MO	AS OF	PED	AFC:	455	489	496	508	509	511	513	516	517	520	521	522
NTA-3B	144867	5346	0	0	0	0	0	10/88			C	R	C	R	R	NA	NA	R	NA	NA	NA	R
NRA-3B	142256	2584	0	0	0	226	0	10/88			NA	NA	R	R	R	NA	NA	NA	NA	NA	NA	R
RA-3B	144843	6558	0	0	0	0	0	10/88			NA	C	NA	R	NA	NA	NA	NA	NA	NA	NA	NA

TOTAL CAT/TRAP LIMIT - 2000 WITH AFC-428 AND AFC-455, 1350 WITHOUT AFC-455, 850 WITHOUT AFC-428

TOTAL FLIGHT HOUR LIMIT - VERSION WITH AFC-477 INC, LIMIT 14000 FH; WITH AFC-508 LIMIT 18000 FH
- BASIC WITH AFC-477 INC, LIMIT 10000 FH (WING LIFE INSPECTION REQD, NO ASPA)
EXCEPT AS MODIFIED BY COMNAVAIRSYSCOM WASHINGTON DC 181536Z MAY 88.

LEGEND:

R = REQUIRED
C = COMPLETED
NA = NOT APPLICABLE
F/S = FS CUSTODY

REPORTING PERIOD: 10/87 - 9/88

A-3 AFC DESCRIPTION/LIMITS

AFC/AFB	SUBJECT	AIRCRAFT	REMARKS
455	FUSELAGE-SERVICE LIFE	EA-3, UA-3, TA-3, KA-3, NA-3, NTA-3	TO BE COMPLETED BETWEEN 1000 AND 1350 ARRESTMENTS. INCREASE LIMIT TO 2000
489	BLEED AIR MOD	A-3, EA-3, UA-3, ERA-3, TA-3, NRA-3, NTA-3, RA-3	
496	STROBE LIGHT	EA-3, TA-3, KA-3, ERA-3, NA-3, UA-3, NRA-3, NTA-3	
508	SLIP MODIFICATION PHASE 1	EA-3, UA-3, ERA-3, TA-3, NRA-3, NTA-3	INSTALL BETWEEN 12,000 AND 14,000 FLIGHT HOURS. INCREASE FLIGHT HOUR LIMIT TO 18,000.
509	SLIP MODIFICATION PHASE II	ALL TMS	ALLOWS TRACKING OF FATIGUE ACCUMULATION.
513	AN/ARC-190(V)	EA-3, UA-3, TA-3	REPLACE ARC-102 HF RADIO.
516	AN/APN-194 RADAR ALTIMETER	ALL TMS	
517	SLIP IIIB CAT HOOK SUPPORT	EA-3, TA-3, UA-3	ELIMINATES CATAPULT HOOK ACTUATOR AND REPLACES WITH RESTRAINING DEVICE.
520	AN/ARA-63 CILS INSTALLATION	EA-3, TA-3, UA-3	
521	ID-1329 INSTALLATION	EA-3, TA-3	
522	FIRE WARNING	ALL TMS	
523	TA/EA CONVERSION	TA-3	
524	ERA COM/NAV UPDATE	ERA-3	
526	NRA COM/NAV UPDATE	NRA-3	
527	ERA-3B ID-1329/ILS	ERA-3	