APPENDIX 23

Visual Identification System for Naval Aircraft (Tail Codes)

The rapid and accurate identification of aircraft has always been of prime importance within Naval Aviation. The explosive expansion of Naval Aviation during World War II compounded this problem.

A three-part identification system had been in use in the fleet from 1923 until World War II. Under this system, the aircraft identification number 5-F-1, which was placed on the fuselage of the plane, meant this was the first airplane in Fighting Squadron 5. After July 1937, the squadron number for carrier based squadrons was the same as the hull number of the carrier. Thus Yorktown (CV 5) would have had VB-5, VS-5 and VF-5 assigned as part of her complement of squadrons. This system was modified by Commander Carriers, Pacific Fleet, on 29 April 1942. To help conceal the identity of carriers engaged in operations in enemy waters, the squadron number was eliminated, leaving just the letter designating the type of squadron and the aircraft number within the squadron. Thus, the marking on the fuselage of the plane would have been F-1 to identify it as the first plane in a fighting squadron without identifying the squadron's number. This was further modified on 22 December 1943, by the deletion of the squadron type letter. All identification as to a specific unit was now removed which allowed aircraft to be drawn from a pool as necessary without the requirement of painting identification information on them.

During World War II, with the increase in the number of fleet aircraft operating in the same area as training planes, the necessity grew even more acute to quickly differentiate the large number of training planes from the operational fleet aircraft. To alleviate this problem, Naval Air Operational Training Command, on 12 January 1943, directed that all aircraft within the command be identified by an alpha/numeric system consisting of three groups of characters. The first letter(s) designated the base assignment for the aircraft. The second letter identified the aircraft mission, while the third group was the number of the aircraft within the squadron. For an example, V-T-29 would indicate the aircraft was from Vero Beach, Fla., it was a torpedo plane, and the 29th aircraft in that Vero Beach, Fla., training unit.

During the last two years of the war, many of the aircraft assigned to the carriers in the Pacific carried symbols denoting the ship or air group to which they were assigned. No directive specifying these markings are known to exist, if there ever were any. From a review of photos of the period, it appears that the symbols were assigned to the CV designated aircraft carriers. While the Escort Carriers, designated CVE, had the symbol assigned to the squadrons that operated aboard the CVEs. Squadrons operating aboard the CVs only had that specific symbol while assigned to that particular carrier. While this was a step in the right direction, the lack of a uniform system was soon apparent when a large number of aircraft were trying to rendezvous after takeoff, before landing or over target areas.

The United States Navy Air Force, Pacific Fleet, issued a standard set of twenty-eight geometrical designs for the CV and CVL class carriers which constituted Task Force 58. These designs were assigned to the vessel and were applied to all aircraft of the attached air group as long as it was aboard. They were applied to both sides of the fin and rudder. While the drawings in the directive only showed the design on the top surface of the right wing, subsequent directives indicate that it was also to be applied on the under surface of the left wing tip.

The Commander, Air Force, Pacific Fleet, on 11 February 1945, issued an instruction for the aircraft in the Hawaiian Sea Frontier. All carrier and training type aircraft were to be identified with a letter followed by the individual aircraft number running from 1 to 99. These markings were not for the purpose of security, but rather to identify U.S. Navy aircraft after numerous reports of violations of air discipline involving flying too close to transport aircraft and ground installations.

Air Force, Pacific Fleet, on 2 June 1945, prescribed a series of recognition symbols for CVEs. These markings were to be painted on both sides of the vertical tail surfaces, as well as the upper right and lower left wing tips. All CVEGs, MCVGs and VCs assigned to ships of the Escort Carrier Force, Pacific, were to carry these designs. Each Carrier Division was assigned a

basic design. The position of the individual vessel within the Division was indicated by a series of narrow stripes.

The system of geometrical symbols carried by Task Force 58 aircraft was difficult to describe over the radio and was not always readily identifiable in the air. To eliminate this problem, Commander Task Force 38, in July 1945, specified a system of 24-inch block capital letters to be used to identify the aircraft of the CVs and CVBs. These letters were to be applied to both sides of the fin and rudder as well as the top right and lower left wing tips. In its original form some ships used a single letter, while others were assigned double letters. This was the beginning of the two-letter Visual Identification System in use today.

Naval Air Stations in Hawaii were assigned letter designations on 10 September 1945, by the Commander, Air Force, Pacific Fleet. These letters were to be followed by a number from 1 to 99 inclusive. In the event all available numbers in the 1 to 99 series were used, and no additional letters were available, the use of numbers over 100 was authorized.

On 8 January 1946, Air Force, Pacific Fleet, issued instructions for the application of markings on the fast carrier aircraft. This directive also assigned new alphabetical designations for the CVs and CVBs and CVLs in place of those specified by Commander Task Force 38. This assignment of the same letter to a different carrier than previously designated, may well have caused the erroneous identification of some photographs as to what ship the aircraft were actually assigned.

All of the previous directives or instructions were a search for an easy system to rapidly identify aircraft. Finally, on 7 November 1946, the Chief of Naval Operations (CNO) established the Visual Identification System for all Navy and Marine Corps aircraft. To be effective, such a system had to be simple, readable and possess enough different combinations to cover the number of aircraft carriers and all types of squadrons to which naval aviation might expand in case of war. A system using letters satisfies these requirements as long as distinctive characters are used. The elimination of the ambiguous letters G, J, N, O, Q and Y left ample combinations to cover such expansion. Since each letter has a phonetic equivalent in communication procedures, the problem of describing geometric markings was replaced by the simple process of enunciating the names of the letters of the alphabet. Under this system each aircraft carrier had either a single or double letter symbol, some of which were a hold over from the previous system. On 12 December 1946, the Visual Identification System of Naval Aircraft was modified by CNO. Under this change the tail codes assigned to the carriers were now reassigned to individual air groups. This permitted greater flexibility since an air group was not permanently assigned to a specific carrier.

Under the CNO system, non-carrier based squadrons, such as VP, VPP, VPW, VPM, VU, VRU, VX and VCN squadrons also used a letter system. In these squadrons the first of the two letters designated the wing or class while the second letter designated the squadron within the wing. Marine Corps carrier-based squadrons used the letters assigned to the parent carrier. While shore-based Marine squadrons used the first letter to designate the Wing or other command, and the second letter identified the squadron within the Wing or Command. The letters in all cases were underscored to denote Marine. It was possible under this system to have the same code letters assigned to a Navy squadron and a Marine Corps squadron concurrently. This requirement to underscore the letters on Marine Corps aircraft was rescinded on 4 August 1948.

The Training Command continued to use the letter number designation system in which the first of one or two letters designated the base or station, while the second letter identified the squadron and/or class designation. The aircraft within the squadron were identified by a one, two or three digit number. The Chief, Naval Air Training, controlled the assignment of the letter symbols within the Training Command.

Naval Air Reserve aircraft were also identified by two letters. The first letter denoted the Air Station to which the aircraft was assigned, while the second letter identified the type of squadron. From this it can be seen that it was possible to have a fleet squadron and a reserve squadron identified with the same two letters. This was resolved by the use of the orange belly band around the fuselage to denote a Reserve aircraft. Reorganization of the Naval Air Reserve in 1970 arranged the reserve squadron system along the same lines as the active fleet structure. The tail code assignments for these squadrons was redone to following the procedures used for the fleet squadrons.

Naval Air Advanced Training Command on 6 January 1947 issued a directive for identifying aircraft within the command. This alpha/numeric system used a letter to identify the Naval Air Station, followed by a second letter designating the squadron at that activity and then a three digit aircraft number. On 31 August 1950, the Chief Naval Air Basic Training issued a direcitve that involved single letters to denote aircraft assigned to the various bases. This was modified on 27 September 1950 to a two-letter system whereby the first letter designated the base and the second letter the squadron. These letters were followed by a three-digit number to denote the individual aircraft within the squadron. On 6 September 1956, Chief of Naval Air Training established a new tail code identification system for the training commands. This system included

two character alpha/numberic codes whereby the number 2 designated Chief Naval Air Basic Training Command aircraft, 3 designated Chief Naval Air Advanced Training Command and 4 designated Chief Naval Technical Training Command aircraft.

One major change to occur was the move from a single letter to two letters to idenify an air group's tail code. The effective date for this change was most likely the beginning of Fiscal Year 1958 (1 July 1957). Specific documenation has not been discovered to verify this date. However, the tail code (Visidual Identification System) listing in the Naval Aeronautical Organization for 1957 shows the changes for the air group tail codes to two letters.

Even though numerous changes have been made since 7 November 1946 to the Visual Identification System, the basic tenet of the system has remained intact. The following is a listing of Tail Codes (Visual Identification System for Naval Aircraft) for Naval Aviation as of the end of 1995:

Command	*Tail Code*
Blue Angels	BA
Carrier Air Wings (former designation Carrier Air Groups)	
CVW-1	AB
CVW-2	NE
CVW-3	AC
CVW-5	NF
CVW-7	AG
CVW-8	AJ
CVW-9	NG
CVW-11	NH
CVW-14	NR
CVW-17	AA
RCVW-4*	AD
RCVW-12**	NJ
CVWR-20	AF
Carrier AEW	
CAEWW-12	GE
ASW Air Groups	
CVSG-50***	AR
CVSG-51****	RA
HELWINGRES	NW
Fleet Composite	
VC-6	JG
VC-8	GF
Fleet Logistic Support	
VRC-30	RW
VRC-40	JK
Fleet Logistics Support Reserve	
VR-46	JS
VR-48	JR
VR-52	JT
VR-53	WV
VR-54	CW
VR-55	RU
VR-56	JU
VR-57	RX
VR-58	JV
VR-59	RY
VR-61	RS
VR-62	JW
Helicopter Antisubmarine Light	
HSL-37	TH
HSL-40	HK
HSL-41	TS
HSL-42	HN
HSL-43	TT
HSL-44	HP
HSL-45	TZ
HSL-46	HQ
HSL-47	TY
HSL-48	HR
HSL-49	TX
HSL-51	TA
HSL-84	NW
HSL-94	NW
Naval Air Systems Command	
Test Pilot School	TPS
MARTD'S/Marine Support	
HQMC	5A
MCAS Beaufort	5B
MCAS Cherry Point	5C
MCAS El Toro	5T
MCAS Futenma	5F

Command	Tail Code
MCAS Iwakuni	5G
MCAS New River	5D
MCAS YUMA	5Y
Naval Air Stations (NAS)	
Alameda	7J
Brunswick	7F
Cecil Field	7U
Fallon	7H
Jacksonville	7E
Key West	7Q
Lemoore	7S
Memphis	7K
Norfolk	7C
North Island	7M
Oceana	7R
Patuxent River	7A
Point Mugu	7L
Whidbey Island	7G
Naval Air Warfare Center Weapons Division	
China Lake	7P
Naval Air Warfarfe Center Naval Aircraft Division	
Patuxent River	SD
Navy Support	
NAF Atsugi	8A
NAF El Centro	8N
NAVSTA Guam	8J
NAVSTA Guantanamo	8F
NAVSTA Mayport	8U
NAF Mildenhall	8G
NAF Misawa	8M
COMFLTACT Okinawa	8H
NAVSTA Roosevelt Roads	8E
NAVSTA Rota	8D
NAS Sigonella	8C
HQ CMEF (Bahrain)	8K
Helicopter Combat Support	
HC-2	HU
HC-3	SA
HC-4	HC
HC-5	RB
HC-6	HW
HC-8	BR
HC-11	VR
HC-85	NW
Patrol	
VP-1	YB
VP-4	YD
VP-5	LA
VP-8	LC
VP-9	PD
VP-10	LD
VP-11	LE
VP-16	LF
VP-26	LK
VP-30	LL
VP-40	QE
VP-45	LN
VP-46	RC
VP-47	RD
VPU-1	OB
VPU-2	SP
Patrol Reserve	
VP-62	LT
VP-64	LU
VP-65	PG
VP-66	LV
VP-68	LW
VP-69	PJ
VP-91	PM
VP-92	LY
VP-94	PZ
Air Test and Evaluation	
VX-1	JA
VX-9	XE
Antarctic Development	
VXE-6	XD
Helicopter Mine Countermeasure Squadron	
HM-14	BJ
HM-15	TB
Fleet Tactical Readiness Group	
COMFEWSG	GD

Command	Tail Code
Fleet Air Reconnaissance	
VQ-1	PR
VQ-2	JQ
VQ-3	TC
VQ-4	HL
VQ-5	SS
VQ-6	ET
Fleet Marine and Marine Support Units Headquarters	
MWHS-1	SZ
MALS-10	SE
MALS-11	TM
MALS-12	WA
MALS-13	YU
MALS-14	CN
HAMS-16	WW
MALS-24	EW
MALS-26	EL
HQSQDN-17	CZ
MALS-31	EX
MALS-36	WK
HQSSDN-37	QF
Attack	
VMA-211	CF
VMA-214	WE
VMA-223	WP
VMA-231	CG
VMA-331	VL
VMA-513	WF
VMA-542	CR
All-weather Attack	
VMA(AW)-332	EA
All-weather Fighter Attack	
VMFA(AW)-121	VK
VMFA(AW)-224	WK
VMFA(AW)-242	DT
VMFA(AW)-225	CE
VMFA(AW)-533	ED
Fighter Attack	
VMFA-115	VE
VMFA-122	DC
VMFA-212	WD
VMFA-235	DB
VMFA-251	DW
VMFA-312	DR
VMFA-314	VW
VMFA-323	WS
VMFA-451	VM
Tactical Electronic Warfare	
VMAQ-1	CB
VMAQ-2	CY
VMAQ-3	MD
VMAQ-4	RM
Aerial Refueler/Transport	
VMGR-152	QD
VMGR-252	BH
VMGR-352	QB
Observation	
VMO-1	ER
VMO-2	UU
Fleet Training	
VMAT-203	KD
VMFAT-101	SH
VMFT-401	WB
Fleet Readiness	
VMGRT-253	GR
Helicopter Heavy	
HMH-361	YN
HMH-362	YL
HMH-363	YZ
HMH-366	HH
HMH-461	CJ
HMH-462	YF
HMH-463	YH
HMH-464	EN
HMH-465	YJ
HMH-466	YK
Helicopter Medium	
HMM-161	YR
HMM-162	YS

Command	*Tail Code*
HMM-163	YP
HMM-164	YT
HMM-165	YW
HMM-166	YX
HMM-261	TV
HMM-262	ET
HMM-263	EG
HMM-264	EH
HMM-265	EP
HMM-266	ES
HMM-268	YQ
HMM-364	PF
HMM-365	YM
Helicopter Light	
HMLA-167	TV
HMLA-169	SN
HMLA-267	UV
HMLA-269	HF
HMLA-367	VT
HMLA-369	SM
Helicopter Training	
HMT-204	GX
HMT-301	SU
HMT-303	QT
Helicopter	
HMX-1	MK
Unmanned Aerial Vehical Operations	
1st UAV	FZ
2d UAV	FF
FAST	FS
C Company	FH
VC-6 Det	FR
DUTCH	FD
Chief of Naval Air Training	
TRAWING ONE	
Meridian	A
	VT-19 A
TRAWING TWO	
Kingsville	B
	VT-21 B
	VT-22 B
	VT-23 B
	JTTU B
TRAWING FOUR	
Corpus Christi	G
	VT-27 G
	VT-28 G
	VT-31 G
TRAWING FIVE	
Whiting Field	E
	VT-2 E
	VT-3 E
	VT-6 E
	HT-8 E
	HT-18 E
TRAWING SIX	
Pensacola	F
	VT-4 F
	VT-10 F
	VT-86 F
Chief of Naval Technical Training	
NATTC Lakehurst	4L
NAS Memphis	4M
Chief Naval Reserve	
Atlanta	7B
Dallas	7D
Selfridge	7Y
Glenview	7V
New Orleans	7X
South Weymouth	7Z
Washington, DC	7N
Willow Grove	7W
Naval Air Reserve	
Jacksonville	6F
Alameda	6G
Memphis	6M
Norfolk	6S

Command	Tail Code
Fourth Marine Aircraft Wing	
HQ 4TH MAW	EZ
H&MS-41	MY
VFMA-112	MA
VMA-142	MB
HMA-773	MP
HMM-774	MO
H&MS-49	QZ
HMH-769	MS
HMH-772	MT
VM0-4	MU
H&MS-42	MW
HMA-775	WR
VMA-134	MF
VMFA-321	MG
H&MS-46	QY
HMM-764	ML
HML-767	MM
VMA-131	QG
VMGR-234	QH
HML-771	QK
HML-776	QL
HMH-777	QM
VMA-124	QP
VMGR-452	NY

* Disestablished on 1 June 1970. RCVW-4 tail letters retained by the following squadrons: VF-101 and VAW-120.
** Disestablished on 1 June 1970. RCVW-12 tail letters retained by the following squadrons: VAQ-129 and VS-41.
*** Disestablished on 17 February 1971. CVSG-50 tail letters retained by the following squadrons: VS-30 and HS-1.
**** Disestablished on 30 June 1971. CVSG-51 tail letters retained by the following squadron: HS-10

Squadron insignia, past and present, showing squadron designation in the lower scroll.

Squadron insignia, past and present, showing squadron designation in the lower scroll.