

- USS ADIRONDACK (AGC): flagship for Admiral Carney as CinsSouth Irvin ordered as skipper, (1952) p, 360 ff; Irvin wants to take the moored flagship to sea one day a month staff demurs but Carney intercedes an account of the first brief cruise, p. 366 ff;
- ANDERSON, Admiral George W.: As CNO three times recommends
 Irvin (Director of the Defense Communications Agency)
 as Vice Admiral McNamara refuses to act, p. 524; p. 550; p. 565-6;
- AIR DEFENSE IN THE FLEET: Adm. Felt's idea that the surface force should take over air defense and free the carriers for air strikes, p. 463-4; Irvin wanted to rewrite the Air Defense Doctrine of the fleet, p. 471;
- U. S. AIR FORCE: conflicting attitudes on supply ships; see MSTS PACIFIC. Air Force policy on transportation of men, p. 638-9; Army begins to follow suit and insist on air transport to Vietnam, p. 642;
- SS AMERICA MARU: Japanese Hospital Ship sunk by the NAUTILUS on patrol in Marianas chain, p. 220-2;
- USS ANGIER: p. 219-20;
- APAMAMA: (Gilbert Islands) p. 183; U. S. objectives after capturing Tarawa, p. 183; NAUTILUS carried a Marine Reconnaissance Company for the initial attack, p. 185; the Marines are landed, p. 200 ff;
- ARNOLD, Rear Admiral Murr: Air Division Commander, T.F. 60 of the 6th fleet, p. 471; calls on Adm. Felt in Washington and gives glowing account of the Air Defense Policy change in the 6th fleet, p. 476-7; see also: entries under: USS NEWPORT and AIR DEFENSE IN THE FLEET;
- ASIATIC FLEET: see entries under: Adm. McVAY: Adm. Bristol; also p. 85-6;
- ASW: see entries under: ADMIRAL JERAULD WRIGHT and OP TEV FOR
- AUSTRIA: Irvin ordered as Liaison officer to staff of Commanding General, U. S. Forces, Austria (1950), p. 310; p. 313; the quadripartite government in occupied Austria, p. 317-8; the Irvin's obtain gatehouse quarters to a

Hapsburg Palace outside Salzburg, p. 321-2; the navy goes on army maneuvers somewhat unprepared, p. 326-334; status of U. S. troops in Austria - not a part of NATO, p. 335-6; the quadripartite naval commission for Austria - a farce because of Russian attitudes, p. 337-8; the truth about the naval liaison arrangement between CincNelm and the commanding general, U. S. forces in Austria, p. 338; the General's idea of being on the alert to retreat into Italy or Switzerland if the Russians moved, p. 339 ff; the question of air support for U. S. army in case the Russians advanced, p. 341 ff; the proviso for air assistance from the 6th fleet - Irvin's mission to Naples for discussion, p. 343 ff; difficulties in the C-47 on the way home, p. 346-7; full story of manner in which 6th fleet air support was arranged, p. 339-359 question of close air support and differing doctrines - the Trieste rehearsal, p. 355; the Sardinian rehearsal, p. 356 ff;

- BADGER, Admiral Oscar C.: skipper of the DD SOUTHARD, p. 88 ff;
- BALLENTINE, Admiral John J.: Commander 6th fleet (1950), p. 342; see additional entries under AUSTRIA;
- BENNEHOFF, RADM Olton Rader: skipper of the S-48 a developer of the torpedo data computer, p. 101; p. 103-4; illustration of his temper and the complications, p. 104-5
- BETIO: the attack on Betio, a component of Tarawa, p. 183-4;

 NAUTILUS charged with observation of beaches after the initial bombardment, p. 184 ff;
- BLAIR, Clay: the author Irvin's comments on his book: SILENT VICTORY, p. 123-4;
- BRISCOE, Admiral Robert P.: DCNO for Operations (1955), moves
 Irvin from Readiness to Op. 34 and Surface Warfare, p.
 447-8;
- BRISTOL, RADM Mark L.: Cine Asiatic Fleet, p. 64-5; his order to the fleet PLAY SOCCER, p. 65; p. 79;
- BROCKETT, Rear Admiral Wm. Alden: as Captain was assistant Chief of Staff to ComBatCruLant, p. 396; helps Irvin master SPS-2 radar on the NORTHAMPTON, p. 397;

- BROWN, Admiral Charles (Cat): Commander of the 6th fleet, p. 471 see also: AIR DEFENSE IN THE FLEET:
- BROWN, Harold: Director of Research and Development under
 McNamara in Defense Department, p. 549; enters the
 picture gratutiously and demands complete control over
 money expenditures for the President's communications
 set up with Latin American countries, p. 557 ff;
- BRUTON, RADM Chester: Chief Assistant in BuPers to Admiral Holloway, p. 434-5; p. 479;

BUNDY, McGeorge: p. 559;

BURKE, Admiral Arleigh: his attitude towards Irvin, p. 456-7; Irvin disapproved of Burke's thesis about getting the ships built and then attend to the necessary ordnance for them, p. 457-8; offers some opposition to Irvin's development of OpTevFor, p. 499-500; aids in development of a "new constitution" for OpTevFor - to have test and evaluation under CincPac Fit as well as CincLant, p. 503-4; p. 519; ordered by Secy. Gates to name Irvin for duty with new Defense Communications Agency - blames Irvin for this, p. 523; refuses to consider naming Irvin as a Vice Admiral, p. 524;

CAMRAHN BAY: see entries under MSTS;

CARNEY, Admiral Robert B.: CincNelm, p. 351; later as CINC SOUTH he comes to Berchtesgaden and confers with General Irwin to effect a greater detente with forces in Austria, p. 361; Irvin calls on Carney as CNO for assistance in getting an assignment to OpNav, p. 432-3; p. 436;

CHINA: Irvin's picture of turmoil, 1928-9, p. 62-3;

CHINA LAKE: see entries under: OP TEV FOR:

COMMAND CONTROL CENTERS: p. 417-8;

CONTAINER SHIPS: p. 652; p. 656-7;

CRU DIV 2: VADM H. A. Yeager (Red) - #2 in BuPers - wanted to have this command but couldn't get release from BuPers so Felt suggests Irvin - he is approved, p. 461 ff;

- Irvin inaugurates some training for his units to prepare for Air Defense of Fleet thus freeing carriers for strike actions (Felt's doctrine), p. 463 ff;
- CUBAN MISSILE CRISIS: session of Kennedy and his advisers, p. 550 ff; President's insistence that a system of communications had to be developed for Latin America; p. 551-2;
- CURTS, Admiral Maurice Edwin (Germany): p. 547; p. 550; p. 560-1;
- DEFENSE COMMUNICATIONS AGENCY; Irvin made Director of the new agency at direction of Admiral Burke, p. 519; Sec'y Gates is adamant on the subject of amalgamation of communication facilities of the services - resistance from the Joint Chiefs, p. 520 ff; Irvin named at the direction of Secy. Gates - Burke furious - blames Irvin - refuses to consider elevating Irvin to Vice Admiral, p. 524; dilemma over command and control, p. 525-7; the orders to Irvin from Gates and Deputy McGuire, p. 528-9; budgetary problems, p. 533-4; difficulties with foreign installations, p. 534 ff; Navy is the principal opponent, p. 536 ff; long lines vs tactical lines - a basis of the navy's argument, p. 536-7; the Bell System and bell standards - the DCA found it necessary to develop a DCA (or military) standard, p. 540; first step - to inventory existing facilities, p. 541-3; 2nd step to exercise control over facilities, p. 542; looking for suitable quarters, p. 545 ff; budget developments, p. 548; whole control picture with DCA changed greatly with advent of the Kennedy Administration, p. 549; McNamara orders DCA to set up communications with Latin American countries, p. 554-5; Harold Brown steps into the picture, p. 557 ff; an argument between Irvin and Fubini precipitated action by Brown - Irvin is dismissed from DCA - CNO Anderson sends him to ServPac, p. 563-5; p. 569-70;
- USS DOBBIN: DD tender Irvin's first duty after Academy, p. 42 ff; his difficulty with Captain Henderson; p. 46 ff transfer to the cruiser TRENTON, p. 54;
- EAST COAST SOUND SCHOOL: p. 143 ff; Dec. 1940 the school is moved to Key West, p. 146 ff; Irvin detached in Jan. 1941, p. 147;

- FELT, Admiral H. D.: Felt about to become Assistant to CNO for Readiness - takes Irvin as his chief assistant, p. 437; Irvin's description of what was entailed in the job with Felt, p. 438-40; Irvin suggests to Felt - the essence of readiness lies in the personnel - Felt sets up a committee on personnel readiness with Irvin as chairman, p. 441-2; Felt goes to command of 6th fleet (1955), p. 448; suggests Irvin for command of CruDiv. 2 (Jan. 1957) and Irvin reports with NEWPORT NEWS as his flagship, p. 462; Felt's thought about surface ships in fleet - they should become practitioners of air defense and free the carrier people to do their job in air strikes, p. 463 ff; p. 475; calls a CNO conference to listen to discussion about Air Defense in surface ships of 6th fleet, p. 477-8; helps Irvin to assignment as head of OpTevFor (Sept. 1958), p. 487-8; p. 489; p. 586-6; p. 592; p. 604;
- FIFE, Admiral James: skipper of the USS NAUTILUS, p. 113-4; a picture of him as a commanding officer, p. 114-5;
- FLINTLOCK OPERATION: on submarine communications, p. 132-3;
- FM SONAR: under development in Point Loma Lab Lockwood wanted it for subs to operate in Sea of Japan, p. 233-6;
- FUBINI, Dr.: comes to power in Defense under McNamara and Brown, p. 549; p. 558; orders Irvin to perform in certain fashion on Orrick Committee and when he refuses he is relieved of his job by General Starbird, p. 564-5;
- GATES, The Hon. Thomas: Secretary of Defense orders the JCS to name a head of the new Defense Communications Agency, p. 520; p. 529; before leaving office his letter to Irvin commending him on the job he had done with the DCA, p. 548-9; p. 570;
- GAVIN, General James: Chief of Staff to Admiral Carney as Cine South, p. 385;
- GRANTHAM, RADM E. B. (Art): head of repair facility in ServPac, p. 607-8; responsible for salvage had Searle on his staff, p. 609-10;
- USS GRAPPIE (salvage vessel): escorts NAUTILUS back to Pearl

Harbor from Apamama, p. 210;

- GUAM: When Nimitz and Lockwood moved headquarters to Guam (Dec. 1944) Lockwood had plans for a permanent sub base in Apra Harbor; after Japanese surrender he never returned to Guam and the base was never completed, p. 241; with the POLARIS subs a base was reinstituted at Guam, p. 242-3;
- GUNS 5 inch 54 gun: experimental use in the NORTHAMPTON, p. 414-17;
- HABITABILITY: Irvin's remarks about 'creature comforts' on board ship, p. 423; his philosophy put into action, p. 429;

see also: entries under: USS NORTHAMPTON:

Interest of Irvin in habitability of the ships for the enlisted men, p. 613-622;

- USS HALIBUT: Irvin joins her as prospective C.O. (Feb. 1943), p. 156; an attack of ptomaine, p. 158-9; command goes to another and Irvin given the NAUTILUS, p. 162-3; crew, p. 164-5; patrols, p. 166-7;
- HAYWARD, VADM John Tucker (Chick): Deputy CNO for Development Op. 07 (1958) gives strong backing for OpTevFor, p. 491; p. 493; p. 498; p. 500-1; Irvin prods him to get some of ASW testing transferred to the Pacific fleet, p. 503; aids in developing new constitution for OpTevFor, p. 503-4; p. 669; interested in promoting diesel type submarines for the Navy hires Irvin as a consultant, p. 669;
- USS HOLLAND: converted as flag for ComSubPac at Guam (Dec. 1944), p. 227-8; p. 241;
- HOLLOWAY, Admiral James, Jr.: Chief of BuPers his actions in respect to the assignment request of Irvin for duty in OpNav, p. 431 ff;
- HOOPER, VADM Edwin B.: p. 603; p. 609;
- HOPWOOD, Admiral Herbert G.: as CincPac showed no interest in expanded efforts of OpTevFor with the Pacific Fleet, p.

- HOR ENGINE: see entry under SUBMARINES;
- USS HOUSTON; relieves the USS PITTSBURGH; Adm. McVey relieves Adm. Bristol Irvin transfers to the HOUSTON in communications, p. 79-81; p. 85;
- IRVIN, Rear Admiral William Davis: Background, p. 1-8; entrance to Naval Academy, p. 10; early difficulties, p. 11; language insufficiency; p. 14-18; saved from dismissal by the Captain of the Football team, p. 15-16; hazing, p. 19 ff; the Reina Mercedes, p. 27 ff; influence of his father on school life before Academy, p. 33-34; summer cruises; p. 34 ff; aviation summer, p. 43; his marriage in Shanghai, p. 84-5; long standing interest in submarine school, p. 87-8; Mrs. Irvin becomes codirector of a school in Coco Solo, p. 99-100; his selection for Rear Admiral, p. 446-7; his dismissal from the DCA by Secretary McNamara, p. 563 ff; CNO gives him an assignment as ComServPac, p. 570; momentous visit with friends in Pebble Beach, p. 573-4; suffers a heart attack in Feb. 1967 - retired from the Navy on May 30, 1967, p. 661-2; a trip around the world, p. 662-68; becomes consultant for General Dynamics, p. 669; later for Gould, Inc., p. 669-71;
- JCS COMMUNICATIONS AND ELECTRONICS: Irvin and BuPers put RADM Wenger in charge of JCS job in Communications and Electronics, p. 479; Wenger dies suddenly and Irvin ordered back in Oct. 1957 to take over, p. 480 ff; his struggle with the services in JCS and issues they did not want to resolve, p. 481-3; commendation from the Chief Signal Officer in the Army for Irvin's performance in the job, p. 486;
- JOHNSON, VADM Felix: recommends Irvin to Gen. Irwin, Commanding General, U. S. Forces, Austria as naval liaison, p. 316;
- JOHNSON, Admiral Roy: CincPacFlt. p. 592;
- KENNEDY, President John F.: p. 550 ff;

- KENNEDY, Robert: p. 550; p. 552-4;
- KIVETTE, VADM Frederick Norman (Knappy): head of Op 05 (1955) struggles on the Ship's Characteristics Board, p. 451-3;
- LeMAY, General Curtis: he takes an interest in the hearings of the National Communications system, p. 563;
- LEMNITZER, General Lyman L.: as Chief of Staff promotes Col. Sampson of DCA to Brigadier, p. 531;
- LOCKWOOD, Admiral Charles: receives NAUTILUS at Pearl Harbor when she returns from her mission off Tarawa, p. 213-4; determined to move his headquarters from Pearl Harbor to Guam when Nimitz moved, p. 227-8; p. 231; his great interest in the FM sonar which he intended for subs operating in the Sea of Japan, p. 233-5; his belief that a completed sub base (Apra Harbor, etc.) would be likely to survive in post-war era, p. 238-41; as Inspector General of the Navy he comes to Great Lakes to investigate the problem of the NGPA's tells Irvin to straighten out the situation quickly before he as Inspector General discovers the details during his tour, p. 257; p. 272;
- LOOMIS, Rear Admiral Frederick Kent: Administrative Commander at Great Lakes when Irvin took over the Service School Command, p. 259-60; p. 267-8;
- LYNCH, Ozzie: Exec on the USS NAUTILUS (1943) with Irvin photographer of great merit, p. 165; p. 167; p. 170; p. 180; his role in the patrol off Betio and Apamama, p. 182-216;
- MARK 48 TORPEDO: p. 422;
- MCDONALD, Admiral David L.: p. 440-1;
- McGUIRE, The Hon. Perkins: Deputy SecDef for Installation and Logistics, p. 520; gets a line on Irvin as a suitable

- director for the Defense Communications Agency, p. 522-23; his orders to Irvin, p, 529-30; p. 522-23; p. 570;
- MAKIN ISLAND: sub activities off Makin Island, p. 176-181; p. 183;
- McNAMARA, Robert S.: Secretary of Defense, p. 550; p. 552; fires Irvin from DCA job at request of Harold Brown, p. 565-6;
- McVay, Adm. Charles B. Jr.: relieves Adm. Bristol as Cine
 Asiatic, p. 79; sends his flagship to sea for exercises
 takes the yacht ISABEL as auxiliary flag, p. 81-2;
 Irvin attached to McVay staff, p. 83;
- MENDENHALL, RADM Wm. K. Jr.: succeeded in OpTevFor by Irvin (Sept. 1958), p. 487-9;
- USS MISSISSIPPI: see entries under: OP TEV FOR;
- MSTS (now termed MSL Military Sea Life): Irvin takes command in the Pacific (1965), p. 623-4; new headquarters in Oakland, p. 624; an account of the organization and its responsibilities, p. 625-7; number of ships, p. 628-9; rates, p. 630-1; demurrage, p. 631-2; difficulties with the Army and the Air Force, p. 632-5; MSTA Washington did not take a stand with the Air Force position on ammo ships, etc., p. 636-7; the "push" theory as it applied to Vietnam over-abundance of supplies, waste, etc., p. 644 ff;

NATIONAL COMMUNICATIONS SYSTEM: see entries under: ORRICK, Wm.;

NATIONAL WAR COLLEGE: Irvin attends, p. 295 ff;

NAURU: p. 206;

USS NAUTILUS: Irvin assigned to her as Communications Engineer after PG school, p. Ill ff; Fife was the skipper, p. 113; p. 121-2; Irvin takes command of NAUTILUS (Aug. 1943), p. 162-3; her photographic reconnaissance of Tarawa beaches, p. 168-9; p. 171-2; difficulties presented with an army observer on board, p. 173-5;

difficulties off Makin Island, p. 176 ff; his role in the assault on Gilbert Islands, p. 182-216; (a thrilling story). Her third patrol in the Philippine Sea, p. 219; difficulties with dwindling fuel supply en route home, p. 222-3; p. 232; see also entries: BETIO; APAMAMA;

- NAVAL TRAINING CENTER COMMAND: p. 253; it's Administrative
 Command and the problem of the NGPA's (nongraduate
 pending assignment), p. 254 ff; BuPers sends the Inspector General to look into the situation, p. 257;
 Center Commander finally orders the NGPA's detached but
 without relief, p. 264-5;
- USS NEWPORT NEWS: flagship for CruDiv.2 Irvin takes command in Jan. 1957, p. 461-2; Irvin gets new installations before sailing for 6th fleet to enable him to function in Air Defense, p. 468-9; story of outfitting and training of NEWPORT NEWS to prepare for her new role in the Mediterranean, p. 463 ff; see also entries under: CruDiv 2.;
- NIMITZ, FI. Adm. Chester W.: p. 231-32; p. 242;
- USS NORTHAMPTON: Irvin gets command of her building at Quincy, Mass. (1953), p. 385; a description of the NORTHAMPTON and her special fittings as a Fleet Command Ship, p. 387-8; the question of the SPS-2 radar, p. 395-6; the target designation system, p. 400-401; the complexion of the crew, p. 402-3; skipper's insistence on knowing details of ship operations, p. 403-5; training experience at Guantanamo, p. 405-8; the experts on board, p. 410; assigned especially under OpDevFor to evaluate new ordnance on the NORTHAMPTON, p. 411-12; use of the NORTHAMPTON for command control linkage, p. 418; Irvin on the value of new electronic devices over human attributes, p. 419-23; Irvin on need for greater dependence on electronics - especially with new missile system, p. 453-5; p. 467-8; his concern for matters of habitability on the ship, p. 618-620;
- OP-34 (SURFACE WARFARE): Irvin (1955) takes over, p. 448 ff;
- OP TEV FOR: Irvin ordered there from Communications and Electronics in the JCS, p. 485; p. 487-8; goes about getting new and larger quarters, p. 490-4; wanted to be

in a position to dictate terms on projects - successful with ships but not with air projects, p. 495-6; because of fight over evaluation of the SPARROW Missile Irvin concluded that in future bureaus would have to turn items over to OpTevFor to evaluate and report back, p. 497; Irvin gets name change from OpDevFor to OpTevFor, p. 498; battle for manpower to handle changed status in respect to evaluation, p. 499; Irvin gets Navy Dept. review of OpTevFor projects every three months, p. 501-2; difficulties in getting fleet cooperation in the Pacific, p. 506-7; great assistance from Swede Ekstrom ComAirPac, p. 506-7; resultant progress in the Atlantic, p. 508-9; OpTevFor and mine projects, p. 510-11; summary of developments during tour of Irvin, p. 511-12; introduces WAVES, p. 514; work on the visual projection project, p. 514-6;

- ORRICK, Wm.: Deputy Assistant Secretary of State under Kennedy said to have been put there by Bobby Kennedy, p. 553-4; chairman of the Interdepartmental Committee on the President's Communications set-up, p. 559; State conducts hearings on the set up of a National Communications System (National Command and Control System), p. 561-3;
- USS PECOS: Irvin ordered to her when the TRENTON returns to the States from Asiatic Fleet, p. 66; orders changed to flag-ship PITTSBURGH when it was learned that Irvin had knowledge and skill in soccer p. 67;
- PG SCHOOL (1935): Irvin trains as Communications Engineer, p. 109-10; p. 112-3;
- POINT MAGU: see entries under: OP TEV FOR;
- USS PITTSBURGH: Irvin's principal duty to organize and coach soccer teams in the Asiatic fleet, also serves as officer in a turret division, p. 68; Irvin finds his forte as communications watch officer, p. 69-70; p. 78-9;
- PROHIBITION in the U.S.: Irvin's picture of drinking in the fleet, p. 46 ff; p. 57-60;
- REICH, VADM Eli T.: lends assistance to Irvin in getting organized at OpTevFor, p. 493; p. 501;

- RESERVE OFFICERS: Irvin is chairman of a Selection Board on Reserves, p. 570-1;
- RICKOVER, Admiral Hyman George: duty on the S-48 in Panama, p. 100-3; p. 105-6; p. 139; p. 150-1; p. 154;
- ROLL ON/ROLL OFF SHIPS: p. 654-6;
- USS S-29: p. 141; Irvin takes command S-29 becomes unit of the East Coast Sound School, p. 143-5;
- USS S-48: Irvin ordered to a billet on her in Panama, p. 94 ff; rigors of life in Panama on the base, p. 96 ff; officer compliment, p. 100; the skipper and Rickover, p. 100; back to Philadelphia (June 1935) and decommissioning, p. 108;
- SAMPSON, Major General George: an army colonel on staff of DCA Irvin asks Lemnitzer to elevate him to Brigadier, p. 531-2; Irvin two years later goes to Chief of Army Staff Brown and recommends Sampson for Major General he gets promotion, p. 533; p. 557; Sampson and Gen. McNitt (Deputy of DCA) urge navy to give DSM to Irvin when Irvin was dismissed by McNamara Anderson and Smedberg turn down the idea, p. 567-8;
- SARDINIA: 6th Fleet puts on an air show and bombardment for the Italians Irvin manages to get the U.S. teams from Austria to participate in the rehearsal before the exercise, p. 356-9;
- SEABEES: they assemble a base in the Philippines to gather supplies for eventual use in Vietnam, p. 648; p. 651;
- SEARLE, Capt. Willard F., Jr.: salvage expert on staff of REAR Admiral Granthan, head of repair facilities, ComServPac, p. 609;
- SERVICE FORCE: Irvin talks about the Service Force and its ultimate eclipse, p. 458-9; action of Nimitz in WWII, p. 460; Irvin takes command as ComServPac, p. 570; Adm. Sides welcomes him to Pacific, p. 576; a survey of component parts of the command, p. 576-7; ComServPac the main Logistic Agent for CincPacFlt. p. 577; Irvin tours Far East to get a view of installations under his

- command, p. 580-2; reports results to Sides, p. 585; p. 586-7; Irvin works on ammunition accountability in fleet, p. 592-5; increasing role of navy in supplying food for the military in Vietnam, p. 603-6; p. 623; division of labors within the command, p. 607-8; salvage problems under repair facility, p. 607-10; (see also entry: SEARLE, W.S.); Irvin's concern for lack of direct action between commander, 7th fleet and ComServFor, p. 611-13; Irvin leaves command in July, 1965 to take over MSTS Pacific, p. 624;
- SERVICE SCHOOL COMMAND Great Lakes, Illinois: Irvin sent there, p. 252; the situation when he took over relationships with the Naval Training Center Command, p. 253-4; the problem of the NGPA's, p. 254-6; Lockwood as Inspector General sent to investigate the custom of retaining NGPA at Great Lakes and not reporting their availability to BuPers, p. 257; Irvin moves to take command - runs into difficulties, p. 258 ff; an illustration of hanky-panky with NGPA personnel - the silver shop, p. 269 ff; results of the report of the Inspector General, p. 272-4; Irvin finds defects in the curriculum, p. 277-80 changes made with BuPers approval, p. 280-1; Irvin's special use of the band personnel, p. 282-3; swimming in Lake Michigan, p. 288-9; achievement of a chapel for the recruits, p. 291-4; Irvin leaves to attend the. National War College, p. 296;
- SHARP, Admiral U.S. Grant: CruDesPacFlt, p. 504; did not want to cooperate with OpTevFor in the Pacific, p. 506; p. 592;
- SHIPS CHARACTERISTICS BOARD: Irvin (1955) takes over Op. 34 Surface Warfare has much traffic with the Board, p.
 448 ff; use of the term "household appliance system" to
 describe manner of approach to ship characteristics, p.
 448-9; p. 452-3; p. 456; p. 481;
- SIDES, Admiral John Harold (Saavy): p. 443; p. 446; as CincPac-Flt welcomes Irvin to the Pacific as ComServPac, p. 576; p. 585-6; p. 592;
- SMEDBERG, VADM Wm. R. Ill: Chief of BuPers his role in struggle to update OpTevFor, p. 499; p. 512; p. 519; turns down idea of a DSM for Irvin because he (and CNO Anderson) felt this was a cover-up on the part of

McNamara, p. 568;

- SOCCER: as practiced in the Asiatic Fleet, p. 65 ff;
- USS SOUTHARD: Irvin ordered to her upon his return from the Asiatic fleet, p. 87; his reception by her skipper, Oscar Badger, p. 88-9; Badger fires the navigator names Irvin, p. 91;
- SPARROW MISSILE: being evaluated by OpTevFor, p. 495-7;
- USS SPEARFISH: Irvin given command in an emergency for a fleet problem, p. 140; then goes to New London to take command of the S-29, p. 141;
- SPC-2 RADAR: newly installed in the Cruiser NORTHAMPTON, p. 395-6; series of texts under OpDevFor, p. 411 ff;
- STARBIRD, Brig. General Alfred D.: takes over from Irvin as head of DCA, p. 565-7;
- SUBMARINES: the situation, personnel-wise, in the late 1930s, p. 116-7; the HORengines and resulting problems, p. 118- 121; Irvin's list of submarine deficiencies as we enter WW II, p. 123-8; Irvin's description of the communications system in submarines, p. 129-35; radars at the beginning of WW II, p. 137-8;
- SUBMARINE COMMUNICATIONS: need for a separate system for submarines, p. 228-30;
- SUBMARINES PACIFIC (ComSubPac): Irvin goes to staff of ComSubPac after 3rd patrol in NAUTILUS communications officer, p. 224; attempt at improvements in broadcast messages, p. 224-5; increased message traffic Lockwood determines that it shall not be curtailed, p. 225; his reasons, p. 226; headquarters moved to Guam when Nimitz moved there p. 227; a lack of operating areas for subs when the war draws to an end Lockwood forced to Sea of Japan operations, p. 231; final sub effort in Sea of Japan, p. 235-6; life guarding capabilities of the subs for pilots from the 21st Air Force, p. 237-8; Irvin left in Guam as acting advance of ComSubPac after Lockwood departed for Tokyo and Washington, p. 239-40; Lockwood arranged big meeting of all sub commanders in Pacific in last weeks of the war to discuss future of

the sub forces, p. 240; Adm. Brown asked for Irvin on his staff in Pearl Harbor (1950), p. 302; p. 305; Irvin goes to Tokyo to see if the Subs can have a part in the Korean War, p. 308-9; Brown gives permission for transfer of Irvin to a post in Vienna, p. 310;

SUB RON 6: p. 118; p. 128;

SUBMARINE SCHOOL: Irvin becomes instructor in communications and electronics (Jan. 1941), p. 147; war-time tasks involved - number of students, requirements, etc., p. 148-53; Irvin leaves the school in Jan. 1943, p. 155-6; p. 161-2;

SUB SQUADRON #2: Irvin becomes Commander of #2 based on New London (1946), p. 243; problem with surplus DD's, German subs, etc., p. 244-5; Irvin comments on the superiority in certain aspects of both German and Japanese subs, p. 246-7;

TAC RON SQUADRONS: p. 349-50. See also entries under AUSTRIA;

USS TRENTON: p. 54 ff; cruise with the Asiatic Fleet, p. 61 ff;

TRIDENT Submarines: Irvin's comments, p. 249;

TRIESTE: U. S. Army troops in occupation of Trieste, p. 355;

TSINGTAO, China: shore leave in Tsingtao (1928) - a graphic story, p. 70-78;

TSUSHIMA STRAITS: p. 233-5;

ULTRA: p. 132-3; p. 230;

U.S. FORCES - AUSTRIA: see entries under: AUSTRIA;

VIETNAM: see entries under: SERVICE FORCE - ComServPac;

VIETNAM - HEADQUARTERS SUPPORT ACTIVITY SAIGON: Adm. Felt as CincPae insisted that the navy man the headquarters since the Army and Air Force were involved otherwise, p, 600; to provide logistic support for the Army and the Air Force, p. 6.01; Irvin works out plans for a headquarters support Activity Plan for the Marines when they should be moved into Vietnam - plan went into

- effect when they came to Danang, p. 602-3;
- WARDER, RADM Frederick B.: his struggles in the Ship's Characteristics Board, (1955), p. 451-2;
- WAVES: Irvin introduces them in OpTevFor, p. 514-6; Irvin pre sides over a selection board on WAVES, p. 572;
- W1ESNER, Dr. Jerome (Jerry); scientific adviser to President Kennedy - takes Irvin and Col. Sampson to meeting with President Kennedy and his advisors, p. 550 ff;
- WILL, Admiral John M. (Dutch): Direction of Training in BuPers his difficulties in post war period, p. 250-1; gets Irvin assigned to the Service School Command at Great Lakes, p. 251; p. 286; head of MSTS in Heidelberg (1951), p. 315; Mrs. Irvin and Mrs. Will on trip to Eastern Med before return to the states, p. 386-7;
- WRIGHT, Admiral Jerauld: p. 443; p. 447; his convictions about CincLant and ASW, p. 503; his opposition to the new constitution of OpTevFor that placed it under both CincLant and CinPacFlt, p. 503-6;

YEAGER, VADM H. A. (Red): in BuPers, p. 461;