

STATEMENT OF
CAPTAIN GORDON G. PICHE
CHIEF, MARINE TECHNICAL AND HAZARDOUS MATERIALS DIVISION
OFFICE OF MERCHANT MARINE SAFETY
BEFORE THE
HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES
SUBCOMMITTEE ON COAST GUARD AND NAVIGATION
AND THE
SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
OCTOBER 15, 1985

GOOD MORNING, MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEES. I AM CAPTAIN GORDON G. PICHE, CHIEF, MARINE TECHNICAL AND HAZARDOUS MATERIALS DIVISION OF THE OFFICE OF MERCHANT MARINE SAFETY, U.S. COAST GUARD HEADQUARTERS. I ALSO HEAD THE COAST GUARD'S FISHING VESSEL SAFETY TASK FORCE. WITH ME IS CAPTAIN EDWARD V. GRACE, CHIEF, MARINE SAFETY DIVISION, ELEVENTH COAST GUARD DISTRICT. I AM MOST PLEASED TO APPEAR BEFORE YOU TO ADDRESS THIS SUBJECT OF MUTUAL INTEREST.

IT IS GENERALLY ACKNOWLEDGED THAT COMMERCIAL FISHERMEN ARE ENGAGED IN ONE OF THE MOST HAZARDOUS OF ALL OCCUPATIONS. IT HAS THE WORST SAFETY RECORD OF ALL U.S. INDUSTRIES. OUR CASUALTY DATA, OBTAINED FROM OUR COMPUTERIZED FILE AT COAST GUARD HEADQUARTERS, ARE COMPILED FROM REPORTS OF CASUALTIES AND PERSONNEL ACCIDENTS SUBMITTED TO THE COAST GUARD BY VESSEL OWNERS, AGENTS, MASTERS OR PERSONS IN CHARGE OF A VESSEL AS REQUIRED BY TITLE 46 CODE OF FEDERAL REGULATIONS PART 4. FISHING VESSEL POPULATION DATA ARE OBTAINED FROM COAST GUARD VESSEL DOCUMENTATION FILES. WE ESTIMATE THERE ARE SOME 32,000 DOCUMENTED COMMERCIAL FISHING VESSELS. RECENT CASUALTY STATISTICS SHOW:

NATIONALLY

- VESSEL LOSSES FOR DOCUMENTED FISHING VESSELS OVER FIVE NET TONS AVERAGED NEARLY 250 PER YEAR BETWEEN 1981 AND 1984. THIS IS A JUMP FROM THE PREVIOUS TEN YEARS WHEN LOSSES RANGED BETWEEN 150 AND 200 EACH YEAR.

- LOSS RATES OF LARGE (OVER 100 GROSS TONS) FISHING VESSELS ARE FIVE TO SEVEN TIMES AS GREAT AS LOSS RATES FOR U.S. OCEANGOING CARGO SHIPS.

- THE DEATH RATE FOR FISHERMEN IS SEVEN TIMES THE NATIONAL AVERAGE FOR ALL INDUSTRY GROUPS. BETWEEN 1981 AND 1984 AN AVERAGE OF 84 LIVES PER YEAR WERE LOST.

IN THE SOUTHWEST DURING THE SAME TIME PERIOD:

- AN AVERAGE OF 33 DOCUMENTED FISHING VESSELS HAVE BEEN LOST EACH YEAR SINCE 1981. ADDITIONALLY, TEN OF THE LARGE TUNA BOATS WERE LOST, NINE BY FOUNDERING ASSOCIATED WITH MATERIAL FAILURE AND HUMAN ERROR, AND ONE BY FIRE.

- 25 FISHERMEN HAVE DIED DURING THAT TIME SPAN; HOWEVER, IT IS NOTEWORTHY THAT NO LOSS OF LIFE OCCURRED IN THE LOSS OF THE TEN LARGER VESSELS.

- DEATHS, VESSEL LOSSES AND CASUALTIES ARE NOT OUT OF PROPORTION WITH THOSE IN OTHER AREAS OF THE COUNTRY.

VESSEL SINKINGS AND LOSS OF LIFE INCIDENTS ARE READILY KNOWN TO THE COAST GUARD BECAUSE OF OUR INVOLVEMENT IN THE RELATED SEARCH AND RESCUE MISSIONS AND INVESTIGATIVE PROCEDURES; THEREFORE, WE FEEL THESE STATISTICS ARE MORE RELIABLE THAN PERSONNEL INJURIES AND VESSEL CASUALTIES NOT INVOLVING DEATHS OR TOTAL VESSEL LOSSES. CASUALTIES INVOLVING THE SMALLER STATE-NUMBERED BOATS USED IN COMMERCIAL FISHING ARE NOT CONSIDERED IN THE ANALYSIS AS THE POPULATION IS UNKNOWN.

HUMAN ERROR PLAYS A MAJOR ROLE IN FISHING VESSEL ACCIDENTS. WE FIND IT TO BE A DIRECT OR INDIRECT CAUSE IN 80 PERCENT OF THE CASUALTIES, GENERALLY RESULTING FROM A LACK OF KNOWLEDGE OF VESSEL OPERATIONS THAT DO NOT RELATE TO THE BUSINESS OF CATCHING FISH. THIS INCLUDES POOR WATCHKEEPING PRACTICES AND PROCEDURES, LACK OF PREVENTIVE MAINTENANCE, NAVIGATIONAL ERRORS, RULES OF THE ROAD VIOLATIONS, AND A GENERAL LACK OF UNDERSTANDING OF THE VARIOUS FORCES ACTING UPON THE VESSEL, ESPECIALLY THOSE AFFECTING STABILITY.

FOUNDERS, FLOODING AND CAPSIZING ARE THE GREATEST CONTRIBUTOR TO LOSSES. CASUALTY DATA SHOWS THAT THEY CONTRIBUTED TO APPROXIMATELY 43 PERCENT OF ALL LOSSES. SOME LOSSES DUE TO CAPSIZING CAN BE TRACED DIRECTLY TO THE MANNER IN WHICH THE VESSEL WAS OPERATED. IN A NUMBER OF CASUALTY REPORTS, THE VESSEL MET THE INTERNATIONAL MARITIME ORGANIZATION RECOMMENDED STABILITY CRITERIA AT THE TIME IT WAS PUT IN SERVICE AND HAD STABILITY LOADING INFORMATION; HOWEVER, THE OPERATOR NEGLECTED TO LOAD OR OPERATE THE VESSEL ACCORDING TO THOSE INSTRUCTIONS.

FIRES AND EXPLOSIONS ARE THE SECOND MAJOR PROBLEM AREA. APPROXIMATELY 25 PERCENT OF THE LOSSES FALL INTO THIS CATEGORY. OVER TWO THIRDS OF THESE CASUALTIES OCCURRED IN THE ENGINE ROOM SPACES DUE TO MACHINERY OR ELECTRICAL FAILURE. A GENERAL LACK OF VESSEL "HOUSEKEEPING" ALSO CONTRIBUTED.

ANALYSIS OF THE CAUSES OF CASUALTIES SUGGESTS THAT MANY COULD HAVE BEEN PREVENTED OR THEIR SEVERITY DIMINISHED IF MORE PRECAUTIONS HAD BEEN TAKEN OR IF THE VESSEL HAD BEEN OPERATED MORE PRUDENTLY. FIRE AND SMOKE ALARMS INSTALLED IN THE ENGINE SPACES WOULD HAVE, IN MANY CASES, ALERTED THE CREW TO A FIRE IN ITS EARLY STAGES. SIMILARLY, A BILGE ALARM WOULD HAVE ALERTED THE CREW TO EARLY FLOODING OF WATER INTO THE VESSEL.

FACED WITH INCREASED COMPETITION FOR LIMITED RESOURCES, OPERATORS ARE ALSO EMBARKING ON VOYAGES UNDER CONDITIONS WHICH WOULD OTHERWISE DICTATE STAYING IN PORT. VESSELS ROUTINELY ENCOUNTER CONDITIONS WHICH SEVERELY TAX THEIR CAPABILITIES. LOSSES ARE INEVITABLE.

SOME HAVE SUGGESTED A MANDATORY LICENSING AND INSPECTION PROGRAM. WHILE A LICENSING/CERTIFICATION PROGRAM IS ATTRACTIVE SINCE IT PROVIDES A MEANS OF ENFORCEMENT, THE COAST GUARD IS CONVINCED THAT FOR THIS PARTICULAR CLASS OF VESSEL AND PERSONNEL A VOLUNTARY PROGRAM CAN PROVIDE AN EQUIVALENT DEGREE OF SAFETY IN A MUCH SHORTER TIME. TO THIS END, THE COAST GUARD WANTS TO CREATE A FRAMEWORK THROUGH WHICH INDUSTRY CAN IMPROVE ITS SAFETY RECORD WITHOUT GOVERNMENT REGULATION. IF A LICENSING AND INSPECTION PROGRAM WERE MANDATED BY CONGRESS, THE COAST GUARD WOULD NEED A SUBSTANTIAL INCREASE IN RESOURCES. FOR EXAMPLE, IN THE AREA OF LICENSING IT WOULD TAKE AT LEAST FOUR YEARS TO IMPLEMENT A PROGRAM AND ISSUE APPROXIMATELY 67,000 LICENSES THAT WOULD BE REQUIRED. OUR TOTAL LICENSING ACTIVITY WOULD INCREASE BY 67 PERCENT PER YEAR. INSPECTION AND CERTIFICATION OF FISHING VESSELS WOULD INCREASE THE TOTAL NUMBER OF VESSELS IN THAT CATEGORY BY 200 PERCENT.

IN FEBRUARY 1984, ADMIRAL GRACEY, COMMANDANT OF THE COAST GUARD, RECOMMENDED TO THE SECRETARY OF TRANSPORTATION A FISHING VESSEL SAFETY INITIATIVE TO REDUCE THE NUMBER OF CASUALTIES IN THE UNINSPECTED COMMERCIAL FISHING VESSEL FLEET. THE SECRETARY ENDORSED THE INITIATIVE, AND FORMULATION OF A SAFETY PROGRAM BEGAN IN THE SPRING OF 1984. THE FISHING VESSEL SAFETY PROGRAM HAS EVOLVED INTO A COMPLETELY VOLUNTARY PROGRAM. THE CURRENT FISHING VESSEL SAFETY AND INSURANCE CRISIS HAS HELPED TO CREATE AN ATMOSPHERE IN WHICH OUR VOLUNTARY PROGRAM CAN BE EFFECTIVE IN REDUCING CASUALTIES AND LOSSES. A TWO-PRONGED APPROACH IS BEING PURSUED: VOLUNTARY VESSEL STANDARDS AND A SAFETY AWARENESS AND EDUCATION PROGRAM.

THE VOLUNTARY VESSEL STANDARDS CONSIST OF A SERIES OF FIVE NAVIGATION AND VESSEL INSPECTION CIRCULARS (NVICs), PUBLISHED BY THE COAST GUARD. THEY ARE TECHNICAL IN NATURE AND AIMED MORE AT FISHING VESSEL DESIGNERS, BUILDERS, AND OUTFITTERS;

AND FOCUS ON SUCH SUBJECTS AS STABILITY; RADIO AND SHIPBOARD NAVIGATION EQUIPMENT; HULL, MACHINERY AND ELECTRICAL EQUIPMENT; FIRE PROTECTION; AND LIFESAVING AND PERSONNEL PROTECTION. THEY DO CONTAIN SOME SPECIFIC OPERATIONAL AND EDUCATIONAL MATERIAL FOR THE FISHERMEN WHICH COULD BE USED NOW AND WILL BE INCORPORATED INTO THE SAFETY GUIDE WHICH I WILL DISCUSS LATER. ALL NVICS HAVE BEEN COMPLETED AND ARE AVAILABLE. I HAVE WITH ME A COPY OF EACH AND WOULD LIKE TO HAVE THEM ENTERED AS PART OF OUR TESTIMONY.

SINCE INPUT FROM THE FISHING INDUSTRY AND OTHER INTERESTED PARTIES IS ESSENTIAL, WE PUBLISHED THE SERIES OF NVICS AS PROPOSED STANDARDS WITH THE INTENTION OF REVISING THEM TO ADDRESS COMMENTS AND COMPILING THEM INTO ONE PUBLICATION IN THE SPRING OF 1986.

TO DATE THE COAST GUARD HAS DISTRIBUTED FOUR OF THESE NVICS TO OVER 170 INDIVIDUALS, GROUPS AND ORGANIZATIONS THROUGHOUT THE U.S. WHO HAVE AN INTEREST IN FISHING VESSEL SAFETY. SEVERAL HAVE SENT DETAILED COMMENTS REGARDING THE FIRST TWO NVICS DEALING WITH STABILITY AND RADIO AND SHIPBOARD NAVIGATION EQUIPMENT. ALL HAVE EXPRESSED A FAVORABLE REACTION TO THE STANDARDS.

THE COAST GUARD RECOGNIZES THAT THERE WILL BE SOME COSTS ASSOCIATED WITH MEETING THESE VOLUNTARY STANDARDS. MANY FISHING VESSELS, HOWEVER, ALREADY CARRY MUCH OF THE RECOMMENDED SAFETY EQUIPMENT. THE LARGEST SINGLE EXPENSE WOULD BE THE STABILITY ANALYSIS WHICH IS EXPECTED TO COST BETWEEN \$1,000 AND \$3,000 DEPENDING ON THE SIZE OF THE VESSEL AND THE COMPLEXITY OF THE OPERATION.

THE SAFETY AWARENESS AND EDUCATION PROGRAM CONSISTS OF THE DEVELOPMENT OF A FISHING VESSEL SAFETY GUIDE AND ASSOCIATED COURSES AIMED DIRECTLY AT FISHERMEN. THE GUIDE, WHICH IS EXPECTED TO BE COMPLETED BY APRIL 1986, WILL BE A BOOKLET WITH SEVERAL CHAPTERS WHICH PARALLEL THE VESSEL STANDARDS, BUT ARE PRESENTED IN PICTURES, DIAGRAMS AND LANGUAGE TAILORED FOR FISHERMEN. THE GUIDE IS BEING DEVELOPED IN A JOINT EFFORT BETWEEN THE NORTH PACIFIC FISHING VESSEL OWNERS' ASSOCIATION AND THE COAST GUARD TASK FORCE. THE FUNDING FOR THE INITIAL VERSION OF THE GUIDE IS \$45,500 FROM A DEPARTMENT OF COMMERCE SALTONSALL-KENNEDY GRANT, \$21,375 FROM THE FISHING VESSEL OWNERS' ASSOCIATION AND \$40,000 FROM THE COAST GUARD. ADDITIONALLY, COAST GUARD PERSONNEL ARE ACTING AS TECHNICAL ADVISORS TO THE CONTRACTOR AND ARE PROVIDING HIM WITH DRAFTS OF CHAPTERS ON SUBJECTS IN WHICH WE HAVE EXPERTISE, INCLUDING RULES OF THE ROAD; RUDIMENTS OF NAVIGATION; WATCHKEEPING; FIRE AND DAMAGE CONTROL; STABILITY; SAFETY AND SURVIVAL EQUIPMENT; AND COAST GUARD PROCEDURES AND STANDARDS. THE FINAL PRODUCT WILL BE TAILORED FOR EACH PART OF THE COUNTRY; THEREFORE, OTHER FISHING VESSEL ASSOCIATIONS AND INTERESTED GROUPS WILL NEED TO GET INVOLVED. THE GUIDE WILL BE DISTRIBUTED PRIMARILY BY THE VESSEL OWNER ASSOCIATIONS AND THE NOAA SEA GRANT AND MARINE ADVISORY SERVICES' NATIONAL NETWORK.

THE TASK FORCE IS INVOLVING FISHING VESSEL INTERESTS TO THE MAXIMUM EXTENT THAT IT CAN. IT HAS COMMUNICATED WITH FISHING VESSEL OWNER ASSOCIATIONS; INSURANCE UNDERWRITERS AND BROKERS; MARINE SURVEYORS; OTHER GOVERNMENT AGENCIES SUCH AS THE NATIONAL MARINE FISHERIES SERVICE (NMFS) OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA); CONGRESSIONAL STAFFERS; COAST GUARD DISTRICTS AND FIELD UNITS; AND THE NOAA/SEA GRANT UNIVERSITY FISHING VESSEL SAFETY CENTERS. THE MOST POSITIVE RESPONSE HAS COME FROM THE NORTH PACIFIC FISHING VESSELS OWNERS' ASSOCIATION, WHOSE MEMBERS ARE TAKING DECISIVE STEPS TO

REGAIN THE CONFIDENCE OF THE INSURANCE INDUSTRY BY DEVELOPING A COMPREHENSIVE VESSEL SAFETY PROGRAM. TASK FORCE PERSONNEL HAVE DISCUSSED THE VOLUNTARY STANDARDS WITH THE ASSOCIATION MEMBERS AND INSURANCE INTERESTS, JOINED FORCES WITH THEM IN DEVELOPING THE CREW SAFETY GUIDE, AND TOTALLY SUPPORT THEIR EFFORTS TO CREATE TRAINING COURSES TO EDUCATE LOCAL FISHERMEN IN SAFETY ON THE BASIS OF THE GUIDE. THE COAST GUARD BELIEVES THIS EFFORT WILL BE THE MODEL THAT OTHER AREAS OF THE COUNTRY WILL BE ABLE TO FOLLOW AND TAILOR FOR THEIR PARTICULAR FISHERIES.

IN SUMMARY, WE FEEL OUR VOLUNTARY PROGRAM WILL MEET THE NEEDS OF INDUSTRY; THAT IS, BE THE FRAMEWORK THAT LOCAL FISHING AND INSURANCE GROUPS CAN USE TO ENSURE A REASONABLE LEVEL OF SAFETY AND REDUCE THE CASUALTY FIGURES. THE PROGRAM CAN BE IMPLEMENTED IN A RELATIVELY SHORT TIME AND HAVE AN IMMEDIATE IMPACT. THE INDUSTRY IS WILLING TO DO SOMETHING NOW. THE COAST GUARD IS MAKING ITS KNOWLEDGE AND EXPERIENCE WITH VESSEL SAFETY AVAILABLE IN A COOPERATIVE EFFORT WITH THE INDUSTRY. WE BELIEVE THE VOLUNTARY SAFETY PROGRAM WILL WORK.

THANK YOU, I WILL BE PLEASED TO ANSWER ANY QUESTIONS YOU WISH TO ASK.