

Identity

Name: Jean-Yves HUET

Function: Managing Director of OTRA, (French-registered oil spill consultancy company)

Date of birth: 22nd march 1954 in Brest (France)

Nationality: French

Marital status: Married

Languages: French, English, Portuguese

Training

Baccalauréat Serie C - (Pre-university exam - Speciality Maths and Physics)

Ecole Nationale des Travaux Publics de l'Etat : Graduated as a Civil Engineer in 1978

Specialities :

- **"Ports Maritimes et Voies Navigables"** : (Maritime ports and inland waterways)
- **"Génie Sanitaire"** : Environmental Engineering i.e. decontamination of waters, drinking water facilities, sewage plants, quality of rivers/coastal waters, etc.

APPENDIX 1: PROFESSIONAL EXPERIENCE**Since May 1995**

Jean-Yves HUET created OTRA, a French registered company, specializing in Oil Spill Response and Preparedness Consultancy in May 1995.

The company provides Consultancy services in all oil spill related fields. (Training, exercises, Contingency Plans, Organization, Oil Spill Management, Assessment of claims and damages, Clean-up of oil spills, soil remediation, etc.)

Since its creation, a large amount of OTRA's activity has been done in Africa, and in particular in Angola. Main projects are listed below:

- Technical assessment of various oil spill response operations, and issuing recommendations in ways of improvement of capabilities (Port of Antwerp, Terminal of Saldanha Bay - South Africa, etc.)
- Designing, organizing and running a joint Oil Spill Response Exercise between Cyprus, Egypt and Israel. This three-day exercise involved actual activation of command structures of the three countries, as well as moving of oil spill response equipment to Port Said (Egypt) and joint deployment of resources.
- Consulting for Pentow Marine, company in charge of oil spill response at sea for the South African government (6 months consultancy);
- Assessment of Elf's oil spill response capabilities in the countries of West Africa and recommendations for improvement;
- Assistance in the co-ordination of International conferences dedicated to Oil Spill Response as Facilitator (IMO/IPIECA Seminar, Cape Town - South Africa, African Petroleum Producers Association, Luanda – Angola, various IMO-PIECA Conferences in Angola);
- Assessment of the Incident Management System of Texaco Angola. Recommendations for improvement of the system were implemented and are used as a standard for oil spill response and preparedness in Angola;
- Running annual oil spill Training and Exercises for Texaco Angola since 1996.
- Study of exposure to oil spill incidents of a refinery in Abidjan (Ivory Coast);
- Assessment of Oil Spill response capabilities of India for International Response Corporation (IRC), with a view to providing advice and services to the Indian National Oil Company, ONGC;
- Assistance in the development of a National Oil Spill Contingency Plan in Angola. Jean-Yves HUET is acting as the Oil Industry Consultant in Angola to coordinate assistance provided by the Petroleum Industry to the Angolan government. This included organizing three Workshops in Luanda with the International Maritime Organization (IMO), the International Petroleum Industry Environment Conservation Agency (IPIECA), the various Angolan Ministries involved in the National Contingency Planning process, and the Petroleum Industry operating in Angola.

Jean-Yves HUET also prepared the draft of the National Oil Spill Contingency Plan, which is the base of a validation workshop to be held in Luanda from 14th to 16th of November 2000.

- Review of the Oil Spill Response and Search and Rescue arrangements in the states of the Indian Ocean Commission (Comoros, Madagascar, Mauritius, Reunion, and Seychelles). This study was done for the European Community (EEC), and proposed recommendations for improvement of the preparedness of the Member-states of the Indian Ocean Commission. The outlines of a project for funding by the European Union were proposed, leading to a Regional Cooperation of the member-states in the issue.
- Designing and running a National Alarm exercise in Egypt. This project was part of the works done to implement a new National Oil Spill Contingency Plan in Egypt. It involved a month in Egypt, in Cairo, on the Mediterranean coast (Alexandria), and in the Gulf of Suez (Suez, Ras Gharib, etc.), for the review of the Contingency Planning arrangements and preparation of the exercises. Two series of exercises were then run, and the overall capability of the new Egyptian organization was tested. Recommendations for improvement were then issued.
- Running an Oil Spill Awareness Seminar in Gabon. This was done at the initiative of Shell Gabon, and aimed at launching a cooperation process between the government agencies and the oil industry operating in Gabon;
- Participating in the Global Initiative process, initiated by IMO and IPIECA which aims at assisting African countries in the process of establishing systems for preparedness and response to oil spills. In this context, a number of seminars were already held in Angola, Benin, Congo, Namibia, Mozambique, Ivory Coast, Mauritania, Senegal, etc. Jean-Yves Huet acted as the mission leader for a number of seminars held in African countries. For the year 2003:
 - ⇒ Angola (August)
 - ⇒ Senegal (October)
 - ⇒ Guinea (December)
 - ⇒ Benin (December)
- Designing an Emergency Management System for Texaco Angola, based on Intranet/ Internet technologies. This system provides Emergency Teams with all information relevant to the Management of a Crisis situation, such an oil spill. It provides access to an Oil Spill Response Equipment database, a contact database, and guidelines for the response to oil Spill incidents, etc and is accessed through Texaco's Intranet.
- Designing and running a Tier 2 Oil Spill Response drill for the Angolan Oil Companies. This exercise, run in September 1999, tested the mutual assistance arrangements of the main oil operators in Angola, and involved the participation of the relevant government ministries playing a role in the Angolan organization for oil spill response.

- Involvement in the development of the Oil Spill Contingency Plan relating to drilling activities in Elf-operated Block 17 in Angola.
- Involvement in the annual series of two training sessions and oil spill response exercises for employees of Cabinda Gulf Oil Company in Cabinda (North Angola). This included training of the personnel and designing and running an oil spill response exercise, based on the Incident Command System.
- Reviewing the existing Oil Spill Contingency Plan for Cabinda Gulf Oil Company. This includes designing area-specific plans, and reviewing oil spill response strategies for the various oil spill scenarios identified.
- Reviewing Texaco Angola's Oil Spill Contingency Plan for their operations in Block 2 (2001).
- Running the annual oil spill response training and exercises for Texaco Angola
- Developing sensitivity maps using ArcView Geographical Information System (GIS) for Angola (Luanda to Soyo and Cabinda shoreline), as well as for Mauritius.
- Involvement in the Regional Contingency Oil Spill Contingency Planning project for the Indian Ocean Islands. This project, concerning Madagascar, the Union of Comoros, Mauritius and Seychelles, was funded by GEF, managed by the World Bank and locally co-ordinated by the Indian Ocean Commission.
 - ⇒ Participation, as a lecturer in a training session (Cape Town, March 2000)
 - ⇒ Running a Contingency Planning workshop in Tamatave (Madagascar, 2000)
 - ⇒ Assessing Mauritius National oil spill preparedness and response system, and running a series of three oil spill response exercises at National level (August 2000). Recommendations were issued as a result of the exercises, with a view to being implemented in the National organization.
 - ⇒ Receipt of oil spill response equipment provided to the ports of Tamatave and Majunga (Madagascar)
- Finalization of the Regional Contingency Oil Spill Contingency Planning project for the Indian Ocean Islands. OTRA was awarded a US\$ 330.000 contract for the finalization of the project. The contract includes the coordination of numerous activities as outlined below. For this project, OTRA sourced and coordinated external expertise relevant to the project. External experts included organizations such as ITOPF, the IOPC Fund, Le Floch Dépollution, the French manager of the stockpile of equipment in Reunion, as well as individual experts for Contingency Planning, Media Handling, etc. Activities coordinated and run by OTRA include:
 - ⇒ Animation of awareness seminars in the different countries
 - ⇒ Reviewing local, provincial, national and regional oil spill contingency plans
 - ⇒ Assisting in the definition of individual countries' national response policy
 - ⇒ Training of the oil spill response equipment operators
 - ⇒ Training of members of the national organization

- ⇒ Running table-top “crisis management” exercises
- ⇒ Running full blown exercises (table-top and equipment deployment)
- Reviewing the oil spill response arrangements in place at the CPC terminal in Novorossiysk (Russia). Based on this review, a training of the oil spill response management team was organized and a full-blown oil spill response exercise designed and run by OTRA. This oil spill response exercise included the deployment of oil spill response resources (oil spill response vessels, and equipment), as well as the management of the oil spill response operation from the Incident Command Centre.

From 1st September 1990 to 30th April 1995 : Jean-Yves HUET was employed by the International Tanker Owners Pollution Federation Ltd (ITOPF), as a Senior Technical Advisor.

The main activities included:

- Response to oil spills, as on site technical adviser on behalf of tanker owners;
- Assessment of damages created by oil spills. This involves surveys, and most of the time coordinating experts called in to assist in the assessment. An important activity in this field is the assessment of damage to fishery activities;
- Technical assessment of claims for compensation presented by "victims" to the insurers of the tanker involved in the spill;
- Training, involving numerous lectures at training courses organized by international organisations, oil companies, etc.;
- Oil spill exercises, mainly due to the new requirements of the OPA '90 legislation, which resulted recently in an increased activity in this sector.
- Contingency planning.

From 1985 to 1990 : Jean-Yves HUET was employed by the Centre de d'Etudes, de Documentation, de Recherche et d'Expérimentations sur les pollutions accidentelles des eaux. (CEDRE), in France

The activities of CEDRE, and my personal involvement can be summarised as follows:

Research & Development about techniques, equipment and products.

This is done through studies, involving laboratory and/or field tests. I was responsible of the R&D projects related to shoreline clean-up, including storage and disposal of oily wastes. I also conducted a few studies related to chemical spills.

Response to oil spills.

CEDRE maintains a 24hr standby for response to spills. Response can consist in providing technical assistance from the office, as is mainly the case for chemical spills, or in being more directly involved as in case of oil spills. While in CEDRE, I was involved in a few incidents. The main incidents involving oil spills were:

- **FOLGOET** : Assistance to local authorities providing advice on shoreline clean-up.
- **AMAZZONE** : Involved in the response team, as technical adviser to the Government. It involved technical advice on cost effective methods of clean-up, disposal, etc. I was also in charge of setting up a clean-up operation of a pebble bank. This was done using a pebble washing machine, designed and built in CEDRE. After successful real scale experiments, a local contractor cleaned 2,000 m³ of oiled pebbles using the machine.

- **EXXON VALDEZ** : Advice to EXXON, for shoreline clean-up of rocks and pebble beaches. This operation involved three weeks work in Alaska.
- **ARAGON** : Leader of the European Community Task Force, which was sent on site to assist the Portuguese authorities. The operation consisted mainly in shoreline clean-up. A total volume of 12,000 Tonnes of Maya crude oil was recovered from the beaches. My involvement consisted in :
 - Providing assistance to the Portuguese authorities about clean-up techniques.
 - Co-ordinating the action of the experts, as well as the French team who was provided with booms, skimmers and pumps by the French Government to support the clean-up operation.
 - Supervising the beach clean-up operation and, later, the disposal programs.

Training.

CEDRE is involved in numerous training programs, either by lecturing at set up conferences, or by running training programs in-house. I organised and ran a number of training courses, including two week practical training for oil company, one week courses for the European Union focused on shoreline clean-up, one week training courses for government personnel in charge of oil spill response (Ministry of Equipment). These courses were run on a regular basis.

Maintenance of databases and use of computer models.

CEDRE has gathered numerous data, which are kept in databases. A number of computer models were also been bought or developed. As the head of the "computer" department I was involved in :

- Designing the computer policy in CEDRE;
- Implementing databases, such as chemical databases, addresses and contact databases;
- Assessing computer models, and/or implementing them. US Coast Guard Hazard Assessment Computer System (H.A.C.S.) was adapted to French needs and it was set up on a remote VAX owned by one of CEDRE's partners. The model was then used to check its limits, and validity. Another important project was to implement and assess a computerised decision aid system funded by the European Union, called SEABEL. This system covered chemical and oil spills, and included a number of modules, for which data relevant to French situation had to be gathered and implemented.
- Adapting a computer program for the calculation of tension in floating booms and testing boom deployment plans for the French National Contingency Plans (POLMAR Plans).

From 1982 to 1985 : Employed by the Ministry of Industry, Energy and Research, based in RENNES (France).

I was posted in department of "Energy", and was in charge of following activities :

- Technical and administrative control of existing hydro-electric plants in Brittany, which included regular safety visits of the dams, overseeing any structural modifications of existing plants, preparation of regular emptying of the lakes created for the plants.
- Project of S.T.E.P., "Station de Transfert d'Energie par Pompage" (Plant for Transfer of Energy by Pumping). The underlying idea of this project was to use cheap energy produced on the electricity network by nuclear power plants at night, to pump water from a lake to an upper lake, and release the stored water back through turbines at peak hours, in order to avoid having to use expensive plants, such as fuel power stations. The lower lake existed and the project consisted in building the upper lake and a subterranean plant, with the pumping rooms. I was involved in overseeing the geological studies, the technical options and the administrative procedures, such as public inquiries, public hearings, etc. I also received training to be able to act as Health and Safety inspector.
- Control of 20 kV lines for distribution of electricity.
- Representative of the local representation of the Ministry of Energy at meetings concerning urban planning documents.

From 1978 to 1982 : Jean-Yves HUET was employed by the Ministry of Equipment (Department of Transport), based in CAEN, France.

In charge of Urban Planning, which involved designing local development plans in liaison with architects, government agencies and local authorities. These plans classify land into urban, industrial and natural areas, for which specific rules of construction are set up, such as kind of construction/activity allowed in each area, restrictions to construction (maximum height of buildings, architectural requirements, etc.)

APPENDIX 2-1: OIL SPILLS ATTENDED BY JEAN-YVES HUET

Vessel name	Location	Year	Comments
FOLGOET	St Nazaire, France	1987	
AMAZZONE	Brittany, France	1988	Clean-up of pebble beaches at Treguennec
EXXON VALDEZ	Alaska, U.S.A.	1989	Advice to EXXON on clean-up of rock and pebble beaches
ARAGON	Madeira, Portugal	1990	Leader of E.U. Task Force. Technical assistance to Portuguese authorities
RIO ORINOCO	Quebec, Canada	1990	Shoreline clean-up
VISTA BELLA	St Barthelemy, Guadeloupe	1991	Shoreline clean-up aerial surveillance - Claims analysis
HAVEN	Italy, France	1991	Aerial surveillance- Advice for at sea operation- Shoreline clean-up - Claims analysis
RIVER MAAS	Falmouth, U.K.	1991	Survey – Claims analysis
BLUE SEA	Tunis, Tunisia	1992	Shoreline clean-up- Claims analysis
SEKI ROLETTE	Hamburg, Germany	1992	Aerial surveillance - Advice on response at sea
KATINA P	Maputo, Mozambique	1992	Organisation of shoreline clean-up – Analysis of clean-up claims
HAWAIIAN EXPRESS	Ulsan, Korea	1992	Shoreline clean-up - Analysis of claims for clean-up and for damage to fisheries activities
EDYTH L	Puerto Barrios, Guatemala	1992	Organise clean-up of shorelines, including mangroves
IRVING NORDIC	Quebec, Canada	1992	Claims analysis

Vessel name	Location	Year	Comments
NAGASAKI SPIRIT	Singapore and Malaysia	1992	Aerial surveillance - At sea response – Coordinating actions of Malaysian authorities and oil companies - Shoreline clean-up
AEGIAN SEA	Coruña, Spain	1992	Support to on-scene team, from office in London
BRAER	Shetland Islands, U.K.	1993	Aerial surveillance - Clean-up of shorelines - Fisheries claims
Unknown source	Portugal Mainland	1993	Shoreline clean-up - Advice to Portuguese authorities
ROBERT MAERSK	Tarragona, Spain	1993	Aerial surveillance - Shoreline clean-up - At sea response -
KOREA VENUS	Inchon, Korea	1993	Fact finding - Surveys - Analysis of fisheries claims
PACIFIC DIAMOND	Inchon, Korea	1993	Clean-up of shorelines in Inchon
ASPILOS	Antwerp, Belgium	1993	Advice on clean-up of the port
NASSIA	Istambul, Turkey	1994	Aerial surveillance- At sea response – Shoreline clean-up
APPOLO SEA	Cape Town - South Africa	1994	Advice on organisation and techniques for shoreline clean-up
SEKI	Fujairah, U.A.E.	1994	Aerial surveillance - At sea response – Shoreline clean-up (buried oil)
HAWAIIAN KING	Saldanha Bay - South Africa	1995	Technical assessment of oil spill response operation.
Marine oil spill originating from a separator	Molongo Oil Terminal	2000	Assistance to Cabinda Gulf Oil Company / Chevron during the oil spill response operations.

Vessel name	Location	Year	Comments
Congo River oil spill	Undetermined origin. Oil surfacing in the Congo river and oiling shorelines in Cabinda	2000	Assistance to the oil companies
TREASURE	Cape Town – South Africa`	2000	Assistance to South African authorities for the organization of the shoreline clean-up operations
IKAN TANDA	Cape Town – South Africa	2001	Assistance in the shoreline cleanup operation following the grounding of thjis cargo ship

APPENDIX 2-2: MAIN CONTINGENCY PLANNING ACTIVITIES BEFORE 1995**Contingency planning for ELF Italiana in Adriatic Sea - 1989**

This study consisted in reviewing the activities of ELF at sea (production platforms), assessing the risks of oil spills, the likely movements of oil spilled, and designing a response strategy to an incident, taking into account sensitive areas. The study also included recommendations on the type of equipment required to implement this response.

Review of Oil Spill Response arrangements in Egypt - September 1990

This study consisted in analysing the risk of oil spills in Egypt, due either to shipping or production platforms. It also included reviewing existing arrangements, and issuing recommendations on response strategy and purchase of equipment. Recommendations on setting up and maintaining the stockpiles of equipment were also made.

Visit to East African countries for US Navy - May 1993

In reference to a study done for the US Navy, regarding oil spill response arrangements and capabilities, I visited Gabon, Kenya, Tanzania, Madagascar and La reunion. Visits included contacts with various government departments involved in the response to oil spills, as well as with the private sector (oil industry mainly).

Review of Oil Spill Response capabilities in Belgium - June 1994

This study consisted in reviewing existing oil spill response capabilities in Belgium and issuing recommendations in ways of improving this capability.

Review of contingency plans in South Africa - October 1994

Although operators of all oil handling facilities in South Africa are required to design contingency plans for oil spills by the end of 1994, only a few individual plans are ready. The object of this review was to assess the degree of preparation, and issue recommendations in ways of organising the response in the South African ports.

Reviewing oil spill response capabilities in Saldanha Bay - South Africa.

The oil importing terminal of Saldanha Bay is built inside a very environmentally sensitive bay. The response to oil spills in the bay must be prompt and effective in order to avoid major consequences to a lagoon. The study involved looking at the existing capabilities to respond to an oil spill incident.

APPENDIX 3: EXPERIENCE IN TRAINING AND EXERCISES (1990-1995)**Teaching on Oil Spill Response Training Courses**

<u>Course</u>	<u>Location</u>	<u>Dates</u>
OSSC Spill Clearance Courses	Southampton, UK	09.07.91, 19.03.93, 30.04.93
SOGESTA/E.E.C. Training Course	Urbino, Italy	14.05.91
Oilchem Recovery Conference	Copenhagen, Denmark	18.09.91-20.09.91
NATO Workshop	Brest, France	17.11.91-23.11.91
POLMAR Training Course	Nantes, France	26.11.91-27.11.91
CALTEX Training Course	Kuala Lumpur, Malaysia	28.11.91-05.12.91
E.E.C. Training Course	Brest, France	26.11.92-27.11.92
VIKOMA Training Course	Isle of Wight, UK	19.04.93
University of Bangor	Bangor, UK	21.04.93
Oil companies Training course	Cape Town, S. Africa	27.10.94-28.10.94
Training course for National Competent Authorities of Cyprus, Egypt, Israel	Haifa, Israel	11.06.95-15.06.95

Participation in Oil Spill Response Exercises / Drills

<u>Exercise</u>	<u>Location</u>	<u>Date</u>
MAERSK Oil Spill Exercise	London, UK	10.03.93
Belgium exercise	Ostend, Belgium	18.10.93-19.10.93
TeeKay Exercise	San Francisco, U.S.A.	02.03.94-04.03.94
Franship Exercise (OPA '90)	Brest, France	15.03.94-17.03.94
Franship Exercise	Brest, France	22.06.94-23.06.94
MOBIL Exercise	London, UK	09.11.94