# International Project Management

EPC Heavy Industrial Projects

This is NOT Ordinary Work

By Bob Stevens

Project Engineering Manager (Retired)
Bechtel Corporation - 01/26/2021

## This International Projects Presentation is:

Everything on Last Year's Project Management Presentation

# **PLUS**

- What Sets International Projects Apart?
- What are Unique Encounters and Consideration?
- Examples and Stories That Will Surprise You and Enlighten You

No Confidential nor Secret Information Safety is NO Accident

### Preface

- Personal Experience and Opinions,
   Not Opinions of Any Company nor Group.
- No Prejudice, But Honest Observations
- Friends in All Countries, Even Today Great People
- I Will Be Speaking of:
  - Governments
  - Cultural
  - Transition from Third and Developing to First World Clashes

# Have Visa, Will Travel

#### Lived, Traveled, or Worked On (16 Countries)

- >USA
- **≻**Mexico
- **≻**Chile
- **≻**Peru
- > Egypt
- **≻**Nigeria
- **≻**Angola
- **≻**Mozambique

- **≻**Austria
- **≻**Romania
- **≻**Russia
- **≻**China
- **≻**India
- **≻**Thailand
- **≻**Australia
- The Moon (Did not Travel nor Live There)



# Human Resources Roles / Jobs

- All the standard items, plus:
- Visas and Visa Renewals
  - Meet and Greet
- Meeting the Chief Of Police Relationship Building
- Security
- Hoteling / Meals
  - Pioneer Camp
  - Main Hoteling and Meals Camp or In Town
    - Camp Habitation Building Requirements, Mess Hall, Canteen, Beer Hall, Recreation, Tie to the Community

- Arrange Medical
  - Shots International Certificate of Vaccination (The Yellow Card)
  - Routine and Pre-Travel Exams
  - Illness and Injury
  - Air Evacuation (e.g., SOS)
- Transportation
  - Vehicles
  - Drivers
  - Driving Permits
- Local Hazards / Learning to Cuss Like a Native
  - Don't Drink the Water / Don't Breathe the Air

- Wage and Benefit Recruiting / Retaining Expat
  - Uplift (e.g., 15%)
  - Extended Work Week (e.g., 60 hours)
  - 15% + 60/40 = 165% of Base Pay
  - R&R and Home Leave every few months
  - Taxes
    - In Country Legal Entity
    - Home Country Legal Entity Retainer
    - Gross Up to Equivalent for Taxes

- Wage and Benefit (Non-Manual) Recruiting In Country
  - Wage Structure Comparable to Local Wages
    - Often a Fraction of US Expat Wages
  - Usually On The High End
    - (e.g., Construction Manager Administrative Assistant More Pay than when she was a Teacher)
  - Fluently Bilingual
  - Extended Work Week (e.g., 60 hours)

- Medical / Fire / Emergency on Site
  - Local Hospital and Doctor
  - On Site Paramedics / Nurse / Ambulance
  - Fire Department
  - Snake Wranglers
- Force Report Contacts Primary / Secondary Evacuation Plans
  - Call Tree 9/11 Example (Upcoming)
- SOS Daily Report of Dangers and Hazards.
- Local Country
- US Dept of State

**International SOS – Daily Digest** (Usually 25 – 50 pages)

#### **AFRICA**

#### **Advisories**

**Bukina Faso:** Polio Outbreak

#### **Notices**

Mali: Fresh attack highlights need to avoid. EXTREME travel risk regions

#### **AFRICA**

#### **Advisories**

**Bukina Faso:** Ongoing Polio Outbreak. Several cases reported in multiple locations.

Advice (4 bullet points)

More Detail (6 long paragraphs)

#### **Notices**

Mali: Five Malian troops injured when their vehicle struck a bomb near Dioungani commune. Etc.

**Advice** 

**More Detail** 

# Recruiting and Training Craft Labor Issues

- Insufficient Numbers in Country With Skills
  - Pipefitters, Electricians, Ironworkers, etc.
- Bring In International Construction Labor
  - Labor and Cultural Issues
  - Feeling of "Encroaching on Our Turf"
  - Lack of Skills Domestically
- Training of Local Craft
  - Safety is a Foreign Concept
- Premium Pay and Benefits

#### **Craft Labor Issues**

- On Site Labor vs Package Fabrication Shops
- Building with Cranes vs. Bamboo Manually Erected
- Four Hour vs. Two Hour Siesta
- Breaks and Settings for part of the 5 Prayers a Day
- Paid Weekly End of Week Morning vs. Afternoon
- Ability to Transfer to other Projects
  - In Country
  - Other Countries

#### Government Issues

Needing More Land for the Flare – How Obtained

- Stepladder
  - Domestic Metal, Only
  - Imported Fiberglass
    - Destructive Examination
    - Not Sampling, every Ladder
  - Building Our Own Ladders

# Government Issues (Con't)

- Permits, Government Regulations
  - Camp Habitation Trailers vs 40-foot Shipping containers
- Different Codes, Extra Regulations

Police – "The Bite" or "A Tip"



# Safety

- Beyond Hard Hats and Safety Glasses (e.g., Parliament)
  - Steel Toed Boots vs. Flip Flops or Bare Feet
  - Confined Space
  - Shoring Trenches
  - Not Walking Under Loads
  - Safety Harness





# Security

- Driving "Rules of the Road"
- Who is "at fault" and financially responsible for a traffic accident?
  - Deep Pockets Even if NOT involved in accident
- If a full Moon Drive with your Headlights Off
- North Coast Road 3 lanes each way (not limited access)
  - Never Drive in the Right Lane Why?
    - A. It is for Parked Cars
    - B. It is for Donkey Carts
    - C. It is for People Standing Talking
    - D. It is for Vehicles Going the Wrong Way
    - E. All of the Above

# Security

- Assume Everything is Bugged
  - Phones
  - Emails
  - Rooms at Work (e.g., Needing a Drawing)
  - Hotel Rooms
  - What can you say?
  - Where can you talk?

# Security (con't)

Guarding Construction – Controlled Access

- During In Country Meeting Who is On the Take from Whom?
  - Compare Notes among Expats Great After Dinner Conversation
  - Purpose of Project Build Plant or Maximize Bribes?
  - How to Make Certain We Get Paid?
- Security From Airport Private Security, Armored SUV (as needed)

# Security (Con't)

#### Where Were You on 9/11?

- On Construction Site 4 pm in Conference Room
- Hotel to Chalets, Beach Assault
- Five Layers of Security Hotel
- Primary and Secondary Evacuation Updated
- Travel to US Different Airport, Check in with Head of Security

General Jim Mattis

USMC (Ret.)

Sec of Defense (Former)



#### Procurement

- Prime / Subcontracts
- Administration Lawyer U.S Trained / Worked in that Country
- Awareness Buying Local Quality, Delivery Promises, Buyer be Ware
- Export / Import Restrictions and Delays
  - Imports Sit in Customs for 1 month no urgency
  - Courier to Bring in Urgent Items Immediately Clears Customs
    - Field Procurement Check Book Duty Paid on the Spot

#### Cultural

Tomorrow Does Not Mean What You Think It Means

Accidentally Killing a King Cobra Snake – Worshiped As a god

Eye Wash Stations and Ablutions

Argument Between Two Tribes / Two Towns – Blocked Access Road

#### Cultural

- Local Tribal Chiefs / Kings Teenage Boys with Gold Ankle Bracelet
- Engineers Scratching Paint on a Parked Car
- "How Does It Feel Being A Native in Your Own Country and Cannot Speak Their Language?"
- When task is completed, engineer folds their hands at their desk and waits for their supervisor to come by and observe them. Sometimes several days.





# 3<sup>rd</sup> World / Developing → 1st World

#### Pilot Friends

- Fastening Seat Belts Show Unknown Concept
- Where do Parents have children Go when on an airplane?
- Lack of Experiences to Develop Wisdom
- Acquiescence to Expat Captain
- Fear Instructors Orders Watch the Fuel Balance Between Wings
- "Gossip Chain" Each one Teach one No Standards F.O. to Jump Seat Trainee. Native Language. No Quality Control. Degradation of Instruction.

# 3<sup>rd</sup> World / Developing $\rightarrow$ 1st World (con't)

- Seen these on the construction site and in Engineering.
- Pressure Safety Valve Offshore Platform –
   Separation Vessel 500 psig
  - Government Has Edict Do Not Pollute the Ocean
  - No PSV Avoid Pollution
  - When A Vessel Overpressures What Happens?
  - Finally I am the Boss You will Do as I Command
  - Engineer in his 40s Adjunct at Local University Teaching Design
- B31.3 Process Piping Code Hydrotest

# Full Penetration Welds – Xray Inspection

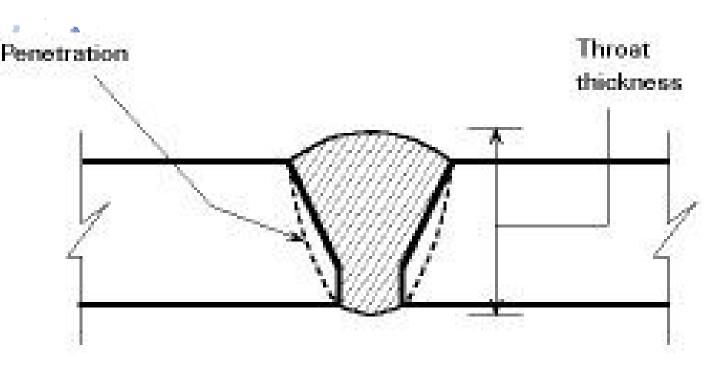


Figure 1 Butt weld with full penetration



# Overall

Challenges, Risks, Frustrations *But* 

Great Rewards
Lifetime Friendships
Pride of Making a Difference