# ROPE ACCESS TEAM PODCAST September 2011

(USBR SOUNDER)

WELCOME TO THE BUREAU OF RECLAMATION GREAT PLAINS REGION PODCAST.

A KEY ELEMENT OF MANAGING WATER OR ELECTRIC POWER...OR ANY OTHER RESOURCE FOR THAT MATTER, IS MOVING IT FROM WHERE IT'S ABUNDANT OR BEING GENERATED...TO WHERE'S IT'S IN SHORT SUPPLY.

IN THE CASE OF RECLAMATION, THIS OFTEN REQUIRES LARGE COMPLEX STRUCTURES BUILT IN CANYONS, OR OTHER AREAS WHERE ACCESS TO INSPECT, MAINTAIN AND REPAIR IS DIFFICULT, DANGEROUS OR COST-PROHIBITIVE.

### (BRIANHOLLIS01:28)

WE BASICLY INSPECT INACCESSABLE FEATURES OF ANYTHING FROM THE POWERPLANTS TO THE CONCRETE DAMS, SPILLWAYS, THINGS NORMALLY YOU CANNOT WALK AROUND OR JUST LOOK AT TO INSPECT. THAT WOULD INCLUDE PENSTOCKS, DOWNSTREAM FACES OF DAMS, GROIN AREAS, ABUTMENTS, POSSIBLY TRUNION PINS, GATE SWING ARMS, GATES THEMSELVES, PRETTY MUCH ANYTHING THAT IT WOULD BE A LOT EASIER TO JUST HANG FROM A ROPE THAN TRY TO BUILD A SCAFFOLDING SYSTEM TO ACCESS.

THAT'S BRIAN HOLLIS, SUPERVISORY CIVIL ENGINEER FOR THE BUREAU OF RECLAMATION, BILLINGS MOBILE DIVISION. HE'S ONE OF A HANDFUL OF RECLAMATION'S PROFESSIONALS WHO HAVE VOLUNTEERED FOR, AND RECEIVED SPECIALIZED TRAINING IN, WORKING AT HEIGHTS MOST OF US WOULD FIND UNNERVING, SUSPENDED IN MID-AIR FROM ROPES.

DURING THE CONSTRUCTION OF THE GREAT DAMS IN THE WEST DURING RECLAMATION'S EARLY DAYS, HISTORICAL IMAGES SHOW DARING WORKERS HELD UP BY WHAT'S KNOWN AS A BOSUN'S CHAIR, A MANILA ROPE SLING BORROWED FROM THE DAYS OF SAILING SHIPS, AND VERY LITTLE IN THE WAY OF SAFETY GEAR. THOSE TECHNIQUES REMAINED VIRTUALLY UNCHANGED UNTIL THE 1990'S WHEN IT BECAME APPARENT THAT DEVELOPMENTS SUCH AS NYLON ROPE AND BODY HARNESSES, ALREADY BEING USED BY MOUNTAINEERS IN EUROPE, COULD INCREASE THE SAFETY OF PERSONNEL. AT THE SAME TIME, A UNIFIED SET OF QUALIFICATIONS AND SAFETY STANDARDS WAS DEVELOPED FOR USE THROUGHOUT RECLAMATION OPERATIONS.

HOWEVER, AS HOLLIS POINTS OUT, THERE ARE IMPORTANT DIFFERENCES BETWEEN MOUNTAIN CLIMBING FOR SPORT AND THE WORK BEING DONE ON RECLAMATION FACILITIES:

#### (BRIANHOLLIS02:19)

MOST RECREATIONISTS JUST USE A HIP HARNESS, TO WHERE WE USE A FULL BODY HARNESS, IT'S MORE OF A SAFETY ISSUE. ALSO A LOT OF THE RECREATIONAL CLIMBERS WILL CLIMB WITH ONE ROPE OR BASICLY JUST HAVE A LEAD CLIMBER TO WHERE WE ALWAYS WORK OFF OF A TWO ROPE SYSTEM, WHERE WE HAVE A WORKING LINE WHERE WE'RE SUSPENDED ON, THEN WE HAVE A BACKUP LINE.

ALL RECLAMATION ROPE ACCESS TEAM MEMBERS ARE CERTIFIED EITHER BY SPRAT—THE SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS, AN INDUSTRY ORGANIZATION IN THE UNITED STATES WHICH DEVELOPS STANDARDS FOR EQUIPMENT AND WORKERS AND INCLUDES RECLAMATION AS A SUSTAINING MEMBER – OR IRATA – THE INDUSTRIAL ROPE ACCESS TRADE ASSOCIATION, FORMED IN EUROPE.

RECLAMATION CIVIL ENGINEER JEFF TICKNOR IS ANOTHER MEMBER OF THE ROPE ACCESS TEAM:

## (JEFFTICKNOR01:21)

FOR RECLAMATION WE REQUIRE EITHER A SPRAT LEVEL ONE, OR AN IRATA LEVEL ONE TO BE ON THE TEAM. AND THEN EACH JOB REQUIRES A SPRAT OR IRATA LEVEL TWO TO SUPERVISE THE JOB. SO WE HAVE TO HAVE AT LEAST TWO PEOPLE ON EACH JOB, NORMALLY WE'LL HAVE THREE OR MORE, DEPENDING ON THE RESCUE SITUATION.

BECAUSE MANY OF THESE OPERATIONS TAKE PLACE IN REMOTE AREAS, FAR FROM EMERGENCY MEDICAL SERVICES OR RESCUE FIRST RESPONDERS, TEAM MEMBERS HAVE TO BE ABLE TO EXTRICATE THEMSELVES OR A TEAMMATE TO SAFETY IN THE EVENT OF INJURY OR EQUIPMENT MALFUNCTION, AND THEN BE ABLE TO ADMINISTER FIRST AID OR CPR AS NEEDED, SO CERTIFICATION IN THOSE AREAS, AS WELL AS TRAINING IN WORKING IN CONFINED SPACES AND AROUND HAZARDOUS ELECTRICAL SYSTEMS IS A REQUIREMENT.

LONG BEFORE THE FIRST ROPE IS RIGGED, EACH ASPECT OF THE CLIMB IS PLANNED, POTENTIAL RISKS EVALUATED AND MITIGATED AS MUCH AS POSSIBLE.

ADDING YET ANOTHER LEVEL OF SAFETY, HOLLIS SAYS ANY TEAM MEMBER IS ENCOURAGED TO SPEAK UP IF HE OR SHE FEELS THERE IS ANY UNACCEPTABLE RISK BEFORE CLIMBING BEGINS OR AT ANY TIME DURING THE OPERATION.

#### (BRIANHOLLIS03:11)

ANY LEVEL...A WORKER LEVEL CAN FIND ANYTHING OR IF EVEN IF YOU FIND A FRAY IN A ROPE, YOU'RE NOT COMFORTABLE WITH THE ANCHORING SYSTEM, ANYTHING TO THAT EFFECT, YOU DEFINITLY HAVE THE RIGHT TO BRING IT TO THE ATTENTION OF THE SUPERVISOR.

THE WORK IS PHYSICALLY AND MENTALLY DEMANDING, OFTEN UNDER TOUGH CONDITIONS, AND EVEN WITH CAREFUL PLANNING THERE IS ALWAYS AN ELEMENT OF RISK INVOLVED, BUT FOR BRIAN HOLLIS AND JEFF TICKNOR, THE FEELING OF ACCOMPLISHMENT IS WORTH ALL THAT EFFORT, AND, WHEN THEY CAN TAKE A MOMENT TO ENJOY IT, THE VIEW FROM UP THERE ISN'T TOO BAD EITHER:

#### (BRIANHOLLIS04:52)

ABSOUTELY (LAUGH)YOU KNOW, ONE THING THAT A LOT OF PEOPLE THINK IS THAT IT'S JUST A BIG GOOF OFF AND IT ACTUALLY IS NOT, WE WORK A LOT OF LONG HOURS, BECAUSE GENERALLY THE WORK WE DO IS OUTSIDE, YOU KNOW, DOWNSTREAM FACES OF DAMS AND SPILLWAYS. THIS ISN'T PART OF ANY OF OUR JOBS, IT'S A SIDE THING THAT WE ALL CHOSE TO DO BECAUSE IT INTERESTS US, AND IT'S KIND OF ABOVE AND BEYOND SO WE ALL HAVE OUR NORMAL JOBS WAITING FOR US BACK AT THE OFFICE, SO WE TRY TO GET THESE JOBS DONE AS QUICK AS POSSIBLE, AND WE BASICLY WORK SUNUP TO SUNDOWN AND THAT MEANS IN THE SUMMERTIME A LOT OF 12, 13, 14 HOUR DAYS HANGING FROM ROPE, I MEAN IT'S VERY TIRESOME BUT A LOT OF OUR FACILITIES ARE IN REMOTE PLACES AND YOU DO GET QUITE THE VIEW SOMETIMES AND MOST OF THEM ARE ALWAYS ON RIVERS SO YOU GOT THE RIVER SCENERY AND THE MOUNTAINS AND IT'S VERY REWARDING WORK, BUT AT THE SAME TIME, YOU DO SIT BACK AND ENJOY IT ONCE IN A WHILE...

## (JEFFTICKNOR02:33)

I ENJOY THE OUTDOORS, AND BEING A CIVIL ENGINEER I'M IN THE DESIGN GROUP AND I DO A LOT OF DESIGN WORK, AND JUST GETTING OUT AND SEEING OUR FACILITIES, WORKING OUTSIDE, THAT'S SOMETHING THAT I ENJOY, SO PERSONALLY, I KIND OF LIKE DOING THAT, PLUS, I'VE DONE SOME SPELUNKING AND A LOT OF TIMES WE'RE GOING INTO PENSTOCKS, OR SPILLWAY TUNNELS, THOSE THINGS ARE SIMILAR TO BEING IN A CAVE, SO IT JUST KIND OF FITS WITH MY PERSONALITY, I GUESS, I LIKE TO DO THAT IN MY RECREATIONAL TIME AS WELL.

FOR MORE INFORMATION ABOUT RECLAMATION'S PROJECTS, RECREATION, HYDROPOWER, FLOOD CONTROL AND THE DEDICATED PROFESSIONALS WHO MAKE IT ALL WORK, VISIT THE GREAT PLAINS WEBSITE AT WWW-DOT-U-S-B-R-DOT-GOV-FORWARD SLASH-G-P.

THIS PODCAST WAS PRODUCED BY BELONGIE ENTERTAINMENT ENTERPRISES FOR RECLAMATION'S GREAT PLAINS OFFICE OF PUBLIC AFFAIRS AND COMMUNICATIONS.

(SOUNDER)

RECLAMATION: MANAGING WATER IN THE WEST.