Afghanistan: Race To Preserve Historic Minarets Of Herat, Jam

By Grant Podelco

Experts from the United Nations cultural agency, UNESCO, are back on the ground in western Afghanistan. They're working with local authorities on a $1 million project to preserve the crumbling, centuries-old minarets in Herat and Jam, which are in danger of collapse. Political instability had forced the teams to interrupt their work. This summer, however, their biggest challenge is not lack of security, but logistics. Massive rigging is needed to stabilize the tall towers, but the equipment is too heavy to transport by normal means. As RFE/RL reports, UNESCO is once again hoping to enlist the help of the U.S.-led military coalition in Afghanistan.

(Audio Slide Show: Saving The Afghan Minarets)

Prague, 12 July 2005 (RFE/RL) -- In Afghanistan's leafy western city of Herat, a two-lane road slices between the city's five remaining 15th-century minarets. Every truck, car, bus, motorcycle, and horse-drawn carriage that passes by sends vibrations coursing through the delicate structures:

In particular, the Fifth Minaret -- all 55 meters of it -- seems ready to collapse into a dusty heap of bricks and colored tiles at any moment. A large crack near its base makes drivers speed up just a little as they pass by.

Professor Giorgio Macchi of Italy's Pavia University helped to stabilize the famous Leaning Tower of Pisa. He has been enlisted to prevent the collapse of the Fifth Minaret. Christian Manhart, a cultural specialist at UNESCO in Paris, recalls Macchi's conclusions after visiting Herat.

"He did his measurements of the crack, and there he saw that we had already several hundreds of oscillations per minute -- small movements -- of the open crack, which is just above the base. And he said this is the proof that the minaret starts to move and that the process of collapse had started. And he said it can collapse within the next three days, three weeks, or three months. We have to do something immediately," Manhart says.

That was almost two years ago. Emergency measures were quickly put in place. Stainless steel cables now connect the Fifth Minaret to concrete blocks sunk into the soil. While that sounds simple, Manhart says the project was anything but. The cables were so heavy that the U.S.-led military coalition had to be called in to airlift them from Kabul.

Manhart says a UNESCO team has just returned from Herat. Experts made soil measurements to determine how best to proceed with the next phase of the project.

"Our aim in the long term is -- long term means 2006 and eventually 2007 even -- to strengthen the foundations of the minaret using steel bars and to link these steel bars with small steel bars which will be placed inside the staircase of the minaret in order to create a new 'backbone' of this minaret, which is now dramatically leaning still and only held by the cables which we have placed in 2003," Manhart says.

Some 300 kilometers from Herat, the 12th-century Minaret of Jam is tucked into a
remote gorge in neighboring Ghor Province. The second-tallest brick minaret in the
world at more than 65 meters, it has survived earthquakes, wars, and the havoc
wreaked by Ghengis Khan.

Unknown to the West until the 1950s, the Minaret of Jam was the first site in
Afghanistan to be placed on the UNESCO World Heritage List. It's also on the List of
World Heritage in Danger, as it, too, is threatened with collapse. Two rivers -- the
Hari Rud and the Jam Rud -- flow close by and are eroding its foundation.

Jam is a treacherous two-day drive from Herat. Italian architect Andrea Bruno --
who also worked to stabilize the tower in Pisa -- led the UNESCO team that just
returned from the area.

"During the last mission, other specialists also have been invited -- two geologists
carried out three different types of inquiry, which were quite difficult due to the
topographical situation of the location of the minaret and the difficulty to transport
the necessary tools by Jeep from Herat to the Jam Valley," Bruno says.

Stabilizing the Minaret of Jam involves wrapping special stainless steel cables
around its base. As in Herat, the task of getting the equipment to such a remote
location presents formidable challenges, as UNESCO's Christian Manhart explains.

"Professor Macchi has made a concept of strengthening [the base] and holding it
together by rolling steel cables around. This also sounds very easy, but these steel
cables must be of a certain material and quality, and also they must be brought
around with a predefined pressure. And this is possible only if you construct a
machine which will roll on rails around. So this machine is presently under
construction in Italy, and the rails also. We then have to bring all this equipment to
this very remote area of Jam," Manhart says.

Manhart says UNESCO is again hoping military helicopters can be called in to help
transport the cables and rails to Jam.

The preservation efforts in both Herat and Jam would be even more difficult were it
not for the enthusiasm the Afghans themselves have shown in the projects. In
addition to lending muscle to repair work, Manhart says Afghans are now actively
involved in protecting their unique cultural heritage.

"Yes, we have very good cooperation with the Afghans. They are very keen to do
this work, and they are also keen to learn, because our projects are not only aimed
at the consolidation of the monuments but also on the capacity building of the
services in Afghanistan in charge of the conservation of cultural heritage. And we
did already a lot of onsite training. We sent some of them already to conferences
and training courses. And the capacity has already considerably improved. There is
extremely good cooperation with them," Manhart says.

Sayyed Makhdum Rahin is Afghanistan's minister of information and culture. He
tells RFE/RL that the next phase of the preservation project is due to get under way
next month.

"About two years ago, based on a proposal by Afghanistan's Information and
Culture Ministry, the Jam minaret was included on the World Heritage List. Since
then, UNESCO has been looking for ways to protect this minaret. We had some
discussions in this regard recently, and starting in August, a [UNESCO] delegation is
due to start its work in order to protect the minaret," Rahin says.

Preservation efforts aren't limited to the minarets themselves, however. Funded by
Italy and Germany, a tile-making workshop has also been set up in Herat. The
minarets in Herat and the nearby mausoleum of Queen Gawhar Shad were at one
time covered with glazed tiles in shades of turquoise, yellow, deep blue, cream, and black. Only scattered patches remain. Hundreds of broken tiles lay like colored candies at the base of the minarets.

Manhart says tile masters were brought back to Herat from Iran and elsewhere, given salaries, and put to work teaching some two dozen students the ancient tradition of tile making. He notes that the tiles, while beautiful to look at, more importantly protect the minarets and mausoleum from the damaging effects of rain and wind.

Professor Bruno says it is vital that these monuments be saved, to preserve the structures themselves, as well as Afghanistan's unique place in the world's cultural history.

"Especially the Minaret of Jam is unique in the world, and you know now it is described on the list of World Heritage Sites. Herat in the past was the first city for the very highest expression of architecture. And not only from an architectural point of view but also from all the other expressions of Islamic art, like calligraphy, mosaics, and poetry. It's been described as the Florence of Afghanistan," Bruno says.

(RFE/RL correspondent Golnaz Esfandiari contributed to this report.)

Audio Slide Show Saving The Afghan Minarets