DROPPED OBJECT: FAST LINE GUIDE ROLLER

WHAT HAPPENED:
The day crew was tripping in DP to 11,000 ft. The trip was stopped to visually inspect the fast line stabilizer guide which had been repaired the previous day. They observed it for 4 stands and found it to be OK. Later during the trip a loud noise was heard above the crew. The trip was stopped and crewmen searched for cause of the noise. It was discovered that the bottom outside roller of the line guide, weighing 6.5 lbs, had fallen from the stabilizer assembly onto the roof. It bounced to an unmanned deck and into a cargo basket. Both sides of the roller had visible wear. One side of the bolt thread was worn down and half of the other bolt was worn down due to roller movement after the lock nut had backed off. There were no injuries.

WHAT CAUSED IT:
The locknut on the bottom outside roller had backed out allowing the roller to fall out. The stabilizer assembly had recently been rebuilt. Investigation revealed that some of the lock nuts had been loosened and re-tightened. All six rollers are seldom changed out at the same time, but it is necessary to loosen all lock nuts in order to re-install the assembly on the fast line. When a locknut is loosened and re-tightened, its break-out torque is reduced (and continues to be reduced further each time the nut is loosened and re-tightened.) To prevent this reduction in breakout torque, the lock nut must be replaced with a new one from the manufacturer and the old one discarded.

CORRECTIVE ACTIONS: To address this incident, this company gave rig personnel the following instructions:

Since the fast line stabilizer guide assembly is overhead and undergoes continuous rigorous vibration, it has high dropped-object potential. Therefore, it is mandatory that each lock nut be used only once.

When removing the stabilizer guide for service or to change one or more rollers:

1. All self-locking nuts on all rollers are to be replaced. Do not re-tighten a lock nut once it has been loosened. Discard all used lock nuts.
2. Do not torque up the nuts fully until the stabilizer assembly guide is squared on the fast line.
3. Ensure the assembly is inspected regularly (as well as subjected to Preventive Maintenance protocols).
4. Have a JSA for rebuilding, servicing or replacing one or more rollers in which the above points are specified.

The Corrective Actions stated in this alert are one company’s attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.