



THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

Reportable
Case no: 314/03

In the matter between:

GOUDA BOERDERY BK

Appellant

and

TRANSNET LIMITED

Respondent

Coram : SCOTT, NAVSA, CONRADIE, CLOETE
JJA *et* ERASMUS AJA

Date of Hearing : 31 August 2004

Date of delivery : 27 September 2004

Summary: Fire in railway reserve 20 m wide – not a ‘veldfire’ within the meaning of s 34 of Act 101 of 1998 – meaning of that section – appellant’s action in delict – legal duty on respondent not to cause harm negligently – failure to establish firebreak in reserve not negligent in the circumstances.

JUDGMENT

SCOTT JA/...

SCOTT JA:

[1] The appellant is the owner of the farm Nuwewater and two adjacent farms in the district of Gouda, Western Cape. Nuwewater is bisected by a 'railway reserve' which is a strip of land 20 metres wide fenced on both sides and along the centre of which runs the main line from Cape Town to the north. The direction of the line at that point is approximately south to north. The station immediately to the south is Voëlvlei; the station immediately to the north is Gouda. The reserve is owned and controlled by the respondent. On 8 February 2001, between 12.30 pm and 1.30 pm, a fire was observed on Nuwewater in close proximity to the reserve. Subsequent investigation revealed that the fire had started within the reserve itself on the western side of the tracks close to a level crossing which provides vehicular access from one portion of Nuwewater to the other. Fanned by a stiff south-easterly wind, the fire progressed in a north-westerly direction both in the reserve and through the fence onto the appellant's property where it jumped a firebreak running parallel to the reserve and entered a harvested wheat field, referred to in evidence as 'stubble land'. From there it spread rapidly, jumping several firebreaks in the process. It was finally extinguished some six hours later. By then it had caused considerable damage, not only on Nuwewater but on

neighbouring farms as well. The cause of the fire was never established. Gates on both sides of the crossing were locked at the time. According to the respondent's records the last trains to have passed through the area were the northbound and southbound Trans Karoo Express at about 12 noon. These would have crossed at the nearby Gouda station. Neither train driver reported having seen a fire or anything untoward at the place where the fire started.

[2] The appellant instituted proceedings against the respondent for damages in the Cape High Court. It founded its claim, in the first instance, on the provisions of s 2 of Schedule 1 to the Legal Succession to the South African Transport Services Act 9 of 1989, alleging that the fire had been caused by a burning object coming from a locomotive or train operated by the respondent. Had this been established the respondent would have been liable in terms of the schedule, subject to certain limitations, to compensate the appellant for its loss without the need for the latter having to prove negligence on the part of the former or its employees. In the event, no evidence was adduced to establish how the fire started and nothing further need be said about this aspect of the appellant's

case. Section 2 of the Schedule has since been repealed by Act 16 of 2002.

[3] In the alternative, the appellant alleged that the damage it had suffered was caused by the negligence of the respondent. The grounds of negligence relied upon were in essence the following:

- (i) The respondent failed to keep the area alongside the tracks free of vegetation although it knew that sparks emanating from a train could cause a fire.
- (ii) The respondent failed to take reasonable steps to prevent a fire from occurring in the reserve.
- (iii) The respondent failed to establish and maintain a firebreak on the western side of the tracks so as to prevent a fire spreading to the appellant's property.

In the course of the trial the appellant amended its particulars of claim to allege that the fire had constituted a 'veldfire'. The object of the amendment was to bring the claim within the ambit of s 34 of the National Veld and Forest Fire Act 101 of 1998 ('the Act') which would have had the effect of placing the burden upon the respondent of proving that it was not negligent. The section reads:

- '34 (1) If a person who brings civil proceedings proves that he or she suffered loss from a veldfire which –
- (a) the defendant caused; or

(b) started on or spread from land owned by the defendant, the defendant is presumed to have been negligent in relation to the veldfire until the contrary is proved, unless the defendant is a member of a fire protection association in the area where the fire occurred.

- (2) The presumption in subsection (1) does not exempt the plaintiff from the onus of proving that any act or omission by the defendant was wrongful.'

[4] By agreement between the parties the court *a quo* was called upon to decide only the issue of liability for such damages as may later be determined. The court (Jamie AJ) came to the conclusion that the fire in question was not a 'veldfire' within the meaning of the section quoted above and that the appellant had failed to establish negligence on the part of the respondent. It accordingly dismissed the appellant's claim with costs, but granted leave to appeal to this court.

[5] It is convenient to consider first the provisions of s 34 of the Act and whether on the facts of the case the effect of the section was to shift to the respondent the burden of proving that it was not negligent. In passing I should mention that although the section does not apply if the defendant is a member of a fire protection association in the area, no evidence was led as to the existence or

otherwise of such an association in the area. In the court *a quo* it appears to have been accepted by both parties that the respondent was not such a member and I shall presume this to be the case. Section 34 differs markedly from its predecessor, s 84 of the Forest Act 122 of 1984. The latter reads:

‘When in any action by virtue of the provisions of this Act or the common law the question of negligence in respect of a veld, forest or mountain fire which occurred on land situated outside a fire control area arises, negligence is presumed, until the contrary is proved.’

This section and its predecessors (ie s 23 of Act 72 of 1968 and s 26 of Act 13 of 1941) were cast in such wide terms as to give rise to a need to cut them down in some way. It was accordingly held that for the presumption to operate the plaintiff had to establish ‘a *nexus* or connection between the fire and the party against whom the allegation is made’.¹ In enacting the present s 34 the legislature abandoned the wide terms employed in the earlier enactments and sought to avoid the difficulties of the past by prescribing more closely what had to be established for the presumption to come into operation. In terms of the section, a litigant in civil proceedings seeking to invoke the presumption is

¹ *Quathlamba (Pty) Ltd v Minister of Forestry* 1972 (2) SA 783 (N) at 788H; see also *Steenberg v De Kaap Timber (Pty) Ltd* 1992 (2) SA 169 (A) at 174F-G; *Van Wyk v Hermanus Municipality* 1963 (4) SA 285 (C) at 295A-B.

required to prove 'that he or she suffered loss from a veldfire which -

- (a) the defendant caused; or
- (b) started on or spread from land owned by the defendant
...'

As far as the situation contemplated in (b) is concerned, an ordinary reading of the section indicates, I think, that what is required is that the fire that starts on or spreads from the defendant's property must at that stage be a 'veldfire' and not some other kind of fire. In other words, the presumption does not operate if the fire that starts on, or spreads from, a defendant's property is not a veldfire on the defendant's property, but becomes one at some later stage. In the case of doubt, the section, containing as it does a so-called reverse onus provision, should in principle be given a restrictive rather than a liberal interpretation. But any doubt is in any event removed, I think, by s 12(1) of the Act, which provides:

'12(1) Every owner on whose land a veldfire may start or burn or from whose land it may spread must prepare and maintain a firebreak on his or her side of the boundary between his or her land and any adjoining land.'

The section clearly contemplates the preparation and maintenance of firebreaks on land, ie veld, on which a veldfire may start, burn or

from which it may spread. If s 12(1) and s 34 were to be construed as applying to some other kind of fire that may start on, burn on or spread from, a defendant's property and later develop into a veldfire, it would mean that an owner of a residential property in a township adjacent to veld would be obliged to prepare and maintain a firebreak. That could never have been what was intended.

[6] As previously indicated, it is not in dispute that the fire started on and spread from the respondent's property. Whether the presumption in s 34 applies or not depends therefore on whether the fire on the respondent's property was a veldfire; in other words whether the strip on either side of the rails in the reserve constituted veld.

[7] The word 'veldfire' is defined in s 1 of the Act as meaning 'a veld, forest or mountain fire'. The fire in the present case was not a forest or mountain fire so the definition is of little assistance. 'Fire' is defined as including a veldfire which means of course that the Act contemplates a fire which is not a veldfire as defined. Section 2(3) reads:

‘A reasonable interpretation of a provision which is consistent with the purpose of this Act must be preferred over an alternative interpretation which is not.’

This provision, too, would seem to provide little assistance. In the absence of a more specific definition in the Act, the starting point must necessarily be the ordinary grammatical meaning of ‘veldfire’.

[8] The word ‘veld’ was borrowed by the English language in South Africa from the Afrikaans or Dutch early in the 19th century. When used with a distinguishing epithet denoting a characteristic feature of an area it has a wide meaning. One speaks for example of ‘highveld’, ‘lowveld’, ‘swartveld’ and ‘backveld’. In this sense it may include a vast area including cities, towns and farmland. (See under ‘veld’ *A Dictionary of South African English on Historical Principles*.) But when used on its own – or for that matter as an epithet to describe a fire – as it commonly is by both English and Afrikaans speakers, it has an ordinary meaning which is well understood and is reflected in the definitions contained in both English and Afrikaans dictionaries. *The Shorter Oxford English Dictionary* defines ‘veld’ as: ‘In South Africa, the unenclosed country, or open pasture-land’. The definition in *The South African Concise Oxford Dictionary* is similar: ‘Open, uncultivated country or grassland in Southern Africa’, while the meaning given in *A*

Dictionary of South African English on Historical Principles is: 'Uncultivated and undeveloped land with relatively open natural vegetation'. The *Verklarende Handwoordeboek van die Afrikaanse Taal* defines 'veld' as: 'Onbewerkte, onbeboste gebied of streek weg van 'n stad, dorp, plaaswerf e.d. af, met of sonder die gewasse daarop', while the *Kernwoordeboek van Afrikaans* gives the following meaning: 'onbeboude, oop, vormlose stuk grond bedek met plantegroei, dikwels as weiding gebruik'.

[9] The meaning of 'veld' was considered by this court as long ago as 1925. In *West Rand Estates Ltd v New Zealand Insurance Co Ltd* 1925 AD 245 it was necessary to construe a term in an insurance policy which excluded liability for loss or damage occasioned by or happening through 'the burning of forests, bush, prairie, pampas or jungle and the clearing of lands by fire'. Both Solomon JA and Kotzé JA took the view that the nearest equivalent in South Africa to a prairie fire was a veldfire and proceeded to consider what was meant by the latter. After noting that every grass fire was not a veldfire, Solomon JA had the following to say:²

'But generally it may be said that the expression *grasveld* conveys the idea of an area covered with veld grass of considerable extent and in its original

² At 253

rough state. Any land, therefore, which had been cultivated or which was immediately connected with buildings, either residential or industrial, would not, in my opinion, be included under the word veld. Thus the ground immediately about a farmhouse is spoken of as “werf” and not veld, even though veld grass may be growing upon it. So that in determining in any case whether a certain area is veld or not, it is not sufficient that it should be covered with ordinary grass, but its extent and the use to which it is put must also be regarded.’

Kotzé JA observed that:³

‘The mere fact that grass, which grows in the veld, happened also to be growing near and between the buildings destroyed, and that this grass caught fire within this area belonging to the appellants, does not constitute a veld fire.’

and added:⁴

‘By veld is generally understood the uncultivated and unoccupied portion of land, as distinct from the portion which is cultivated, occupied and built upon. It is that part of open and unoccupied land over which cattle and sheep and other stock are turned for grazing purposes.’

I am unaware of any judicial interpretation to the contrary. In *Van Wyk v Hermanus Municipality*⁵ this meaning of veld was accepted by Watermeyer J who was not prepared to regard a fire on a golf course as a veldfire.

³ At 264

⁴ *Ibid*

⁵ *Supra*, (n1)

[10] To return to the facts, the distance between the fence on the western side of the railway reserve and 'the edge of the grass' (presumably adjacent to the aggregate supporting the rails) was measured at the *in loco* inspection to be 7.5 metres. Running parallel with the rails on the western side, ie within the 7.5m strip, was a service road which was measured to be 2.3 metres wide and was bisected by what was described as a 'middelmannetjie'. Judging from the condition of the unburnt vegetation in the reserve between the rails and the fence on the eastern side immediately after the fire, it was accepted that the reserve on the western side prior to the fire was generally covered in dry grass with clumps of small bushes of the kind one would normally find in the veld in that locality. Being the dry season, the vegetation would have been readily combustible. There was also some wheat growing in the reserve caused by the wind dispersing seed from the adjacent wheat fields. It was explained in evidence that the service road, which amounted to little more than twin tracks, was no longer maintained as the railway line was maintained and repaired by railway employees travelling on trucks that ran on the rails themselves.

[11] As indicated, the court *a quo* come to the conclusion that the railway reserve did not constitute 'veld' and that a fire in the reserve was accordingly not a veldfire within the meaning of the Act. In my judgment this finding was correct. The reserve is a relatively narrow strip, fenced and immediately connected with the railway line and the structures serving it such as poles supporting overhead wires and the like. One of the objects of an enclosed reserve is presumably to prevent or at least deter unauthorised people for their own good from coming too close to or onto the rails or from interfering with railway structures. Another would be to accommodate equipment that may have to be offloaded when necessary to effect repairs, whether to the rails themselves or other structures, including the bed on which the rails are laid, and to afford workers some space within which to operate. Although, therefore, the vegetation growing in the reserve may be similar to that found in the veld, the reserve differs from the ordinary meaning of veld both in relation to its shape and use. It is in reality a strip of land with an industrial use. A further indication that the respondent's property is not 'veld' within the meaning of the Act appears from the Act itself. In terms of s 12(1), quoted above, an owner of land on which a veldfire may start is obliged to prepare and maintain a firebreak 'on his or her side of the boundary

between his or her land and any adjoining land'. Where the land in question takes the form of a strip 20 metres wide it would mean that whatever the use to which the land may be put owner would be obliged to turn nearly the entire strip into a firebreak. Such a result could never have been what was intended. The result would be that virtually every stretch of railway reserve, and for that matter road reserve, in the rural areas would have to be turned into a firebreak. It follows that in my view the appellant was not assisted by s 34 of the Act and bore the onus of proving on a balance of probabilities all the elements of its action for damages against the respondent.

[12] It is now well established that wrongfulness is a requirement for liability under the modern Aquilian action. Negligent conduct giving rise to loss, unless also wrongful, is therefore not actionable. But the issue of wrongfulness is more often than not uncontentious as the plaintiff's action will be founded upon conduct which, if held to be culpable, would be prima facie wrongful.⁶ Typically this is so where the negligent conduct takes the form of a positive act which causes physical harm. Where the element of wrongfulness gains importance is in relation to liability for omissions and pure

⁶ *Sea Harvest Corporation (Pty) Ltd and another v Duncan Dock Cold Storage (Pty) Ltd and another* 2000(1) SA 827 (SCA) para [19] at 837H

economic loss.⁷ The inquiry as to wrongfulness will then involve a determination of the existence or otherwise of a legal duty owed by the defendant to the plaintiff to act without negligence: in other words to avoid negligently causing the plaintiff harm.⁸ This will be a matter for judicial judgment involving criteria of reasonableness, policy and, where appropriate, constitutional norms.⁹ If a legal duty is found to have existed, the next inquiry will be whether the defendant was negligent. The test to be applied will be that formulated in *Kruger v Coetzee*¹⁰, involving as it does, first, a determination of the issue of foreseeability and, second, a comparison between what steps a reasonable person would have taken and what steps, if any, the defendant actually took. While conceptually the inquiry as to wrongfulness might be anterior to the enquiry as to negligence¹¹, it is equally so that without negligence the issue of wrongfulness does not arise for conduct will not be wrongful if there is no negligence.¹² Depending on the circumstances, therefore, it may be convenient to assume the existence of a legal duty and consider first the issue of

⁷ See *Minister van Polisie v Ewels* 1975 (3) SA 590 (A); *Administrateur Natal v Trust Bank van Afrika Bpk* 1979 (3) SA 834 (A)

⁸ *Indac Electronics (Pty) Ltd v Volkskas Bank Ltd* 1992 (1) SA 783 (A) at 797F; *Minister of Safety and Security v Van Duivenboden* 2002 (6) SA 431 (SCA) para [12] at 441F-G

⁹ See eg *Minister van Polisie v Ewels* (n7) at 597A-B; *Minister of Law and Order v Kadir* 1995 (1) SA 303 (A) at 318E-G; *Minister of Safety and Security v Van Duivenboden* (n8) para [22] at 447F-H

¹⁰ 1966 (2) SA 428 (A) at 430E-F

¹¹ *Cape Town Municipality v Bakkerud* 2000 (3) SA 1049 (SCA) para [9] at 1054H-I

¹² *Cape Metropolitan Council v Graham* 2001 (1) SA 1197 (SCA) para [6] at 1203E-G

negligence.¹³ It may also be convenient for that matter, when the issue of wrongfulness is considered first, to assume for that purpose the existence of negligence.¹⁴ The courts have in the past sometimes determined the issue of foreseeability as part of the inquiry into wrongfulness and, after finding that there was a legal duty to act reasonably, proceeded to determine the second leg of the negligence inquiry, the first (being foreseeability) having already been decided. If this approach is adopted, it is important not to overlook the distinction between negligence and wrongfulness.

[13] In the court *a quo* Jamie AJ considered first the question of wrongfulness and thereafter the question of negligence. As to the former, he expressed himself as follows:

'I am of the view that the legal convictions of the community would, in a case such as the present, expect that if the defendant's negligent conduct leads to harm by fire to a neighbour's property, such harm should be regarded as having been wrongfully inflicted, or, put another way, that the defendant should be regarded as having been subject to a duty not to cause such harm. In arriving at this conclusion I particularly bear in mind the fact that the

¹³ See eg *Sea Harvest Corporation and another v Duncan Dock Cold Storage (Pty) Ltd and another* (n6) para [20] at 838H-J; *Mkhatswa v Minister of Defence* 2000 (1) SA 1104 (SCA) para [18] at 1111E-G; *S M Goldstein & Co (Pty) Ltd v Cathkin Park Hotel (Pty) Ltd and another* 2000 (4) SA 1019 (SCA) para [7] at 1024F; *Mostert v Cape Town City Council* 2001 (1) SA 105 (SCA) para 43 at 120I-121C

¹⁴ *Minister of Safety and Security v Van Duivenboden* (n8) para [12] at 442A-B

defendant is a commercial entity, all of whose shares are held by the State, and that its purpose is to conduct a commercial rail operation. That being the case, and if it can be shown to have acted negligently and in a manner to have caused harm, there can be no reason to excuse it from liability. In arriving at this conclusion, I take into account the fact that the net of liability will not be cast too wide as a plaintiff still needs to establish both negligence and causation before it is entitled to succeed.

In the premises, I hold that the defendant was under a legal duty to the plaintiff not to negligently cause harm to it, more particularly by allowing a fire to spread from its property to that of the plaintiff.'

I am in full agreement with both the reasoning of the learned judge and his formulation of the inquiry. Neither party in this court sought to attack this aspect of the judgment, and rightly so.

[14] Turning to the question of negligence, there can be no doubt that the reasonable possibility of a fire in the reserve and of it spreading to neighbouring properties was foreseeable. The respondent was accordingly obliged to take such precautions as were reasonable to guard against that eventuality. What those steps would have been depends on an examination of all the relevant circumstances and involves a value judgment which is to be made by balancing various competing considerations. These have been said to include:

'... (a) the degree or extent of the risk created by the actor's conduct; (b) the gravity of the possible consequences if the risk of harm materialises; (c) the utility of the actor's conduct; and (d) the burden of eliminating the risk of harm.'¹⁵

If a reasonable person would have done no more than was actually done, there is no negligence.

[15] Evidence adduced on behalf of the respondent was to the effect that the risk of fire caused by a train had become almost negligible subsequent to the respondent ceasing to use coal-fed steam locomotives except on occasions in the wet months of winter. Nonetheless, there remained the risk of fire resulting from overheated brakes or axles igniting vegetation in the reserve. But this risk was said to be minimal. To guard against it, heat detectors were placed on the tracks at various points. One such detector was positioned between Voëlvlei and Hermon to the south of the appellant's property. There was another to the north between Wolseley and Romansrivier. If the heat caused by a train passing over a detector was excessive an alarm would go off at the Centralised Traffic Control Centre at Worcester and the train would be stopped. But nothing like this occurred on the day in question. On the contrary, it was common cause that the fire had not been

¹⁵ *Ngubane v South African Transport Services* 1991 (1) SA 756 (A) at 776G-J

caused by a train; nor was there any suggestion that railway employees had been working in the area. What was suggested in argument was that the fire may have been started by unauthorised persons trespassing on railway property. This may well have been the case, but in that event, the trespasser may just as well have started the fire in the appellant's stubble lands which, judging from the manner in which the fire spread, would have been no less combustible than the vegetation in the railway reserve.

[16] The main argument advanced on behalf of the appellant was that the respondent ought to have established and maintained adequate firebreaks in the reserve on both sides of the tracks and that had it done so, the fire would not have spread. Mr Adriaan Visagie, a fire officer employed in the Bellville office of the respondent's fire department, readily conceded that the fire would probably not have spread to the appellant's property had there been a firebreak within the reserve on its western boundary. He explained, however, that the making and maintenance of firebreaks were way beyond the resources of his department. His office alone, he said, was responsible for some 3 000 km of track in the Western Cape. He testified further that given the limited extent of the risk and the fact that in the area concerned farmers

had made firebreaks adjacent to the reserve, further firebreaks actually in the reserve were considered unjustified. He said that a machine which ran on the rails was used to spray the vegetation in the railway reserves with a herbicide, but he was unable to say how frequently or in what circumstances this was done as it was not something with which he was concerned. Another witness called by the respondent, Mr Hannes de Kock, the track manager at the Centralised Traffic Control Centre at Worcester, explained that all train drivers in the area maintain radio contact with the centre. In the event of a fire or anything untoward they are required immediately to inform the Centre which relays the message to the Joint Operation Centre in Johannesburg. Should there be a fire, the latter alerts the appropriate body.

[17] Mr Barend Kotze, a member of the appellant, testified that he had previously made a firebreak on the appellant's property adjacent to and on the western boundary of the railway reserve. He explained that he had done so in October or November the previous year using a disc plough extended to its maximum of four metres. By ploughing in both directions he had made the firebreak eight metres wide. Subsequently and from time to time, he had reploughed certain sections when weeds came up after the rain.

He said he regarded the firebreak to be adequate and in good condition at the time of the fire on 8 February 2001. In passing I should mention that he would have made the firebreak with the full knowledge that there was no firebreak in the railway reserve. There is nothing to suggest that he ever complained to the respondent about the condition of the reserve.

[18] The appellant called as an expert Mr Josias Visser who was employed by the Breë Rivier District Council as head of the fire department and whose office was at Ceres. He expressed the view that the appellant's firebreak was adequate in the circumstances, but then added that this was so only if there was an adjacent firebreak within the reserve, also eight metres wide, so that there existed an effective firebreak 16 metres wide. This evidence was in conflict with his expert summary in which he expressed the view that a firebreak having a width of 10 metres would have been adequate in the circumstances. His explanation that the opinion expressed in his summary was of general application and did not pertain to the firebreak in question was rejected by the court *a quo*, which held that Visser had adapted his evidence so that it would coincide with that of Kotze who testified that the width of the firebreak on the appellant's property was 8 metres as opposed to

10 metres. This finding was not challenged on appeal and rightly so.

[19] In my judgment, the failure of the respondent to establish firebreaks within the reserve cannot in the circumstances be regarded as unreasonable. To require the respondent to do so would be to place a burden upon it which would be quite intolerable and incommensurate with the risk involved. The appellant's property, moreover, falls within an area in which open fires in the summer months had been prohibited by the local agricultural society. It was no doubt for this reason that the firebreak on the appellant's property was made by ploughing and not by burning. If counsel's contention were to be upheld it would mean that notwithstanding the existence of the appellant's firebreak and the minimal nature of the risk, the respondent would have been obliged to turn virtually the entire reserve into a firebreak and to achieve this by a means other than burning.

[20] A further argument advanced on behalf of the appellant was that the appellant had failed to adequately reduce the extent of the vegetation in the reserve by spraying with a herbicide. It was not suggested that by spraying it could be reasonably expected that all combustible plant material would be eradicated. But no evidence

was led as to when the respondent ought to have sprayed, at what intervals, what the cost would have been and what its effect would have been on the state of the vegetation in February when the fire occurred. There was therefore no evidence to enable the court to judge the reasonableness or otherwise of what it was the appellant contended that the respondent ought to have done, as opposed to what it did do. The contention was simply founded on the assumption that because the fire spread to the adjacent property it had to follow that there had been no spraying or if there had been, it was inadequate. But the assumption is misplaced. Given the vagaries of an open fire in a strong wind it does not at all follow that the fire would have been confined to the reserve and would not have spread had the plant material been reduced by some unknown extent by spraying.

[21] It follows that in my view the appellant failed to establish that the respondent was negligent and the appeal must therefore fail.

[22] The appeal is dismissed with costs.

D G SCOTT
JUDGE OF APPEAL

CONCUR:

NAVSA	JA
CONRADIE	JA
CLOETE	JA
ERASMUS	AJA

